Institute of Local Government

Centre for Resource Studies

Queen's University
Kingston, Ontario

# Eastern Arctic Study
# Case Study Series:
# Beaufort Sea Oil and Gas Development

by

M.P. Sharon Brown
Katherine A. Graham
Margot J. Wojciechowski

EASTERN ARCTIC STUDY
Centre for Resource Studies
Kingston
Completed December 1982
Released March 1985

**Canadian Cataloguing in Publication Data**

Brown, M.P. Sharon (Mary Patricia Sharon), 1955-
Beaufort Sea oil and gas development

(Eastern Arctic study case study series)
ISBN 0-88757-049-6

1. Offshore oil industry - Environmental aspects - Beaufort Sea Region. 2. Offshore oil industry - Social aspects - Beaufort Sea Region. 3. Offshore gas industry - Environmental aspects - Beaufort Sea Region. 4. Offshore gas industry - Social aspects - Beaufort Sea Region. 5. Indians of North America - Beaufort Sea Region - Government relations. I. Graham, Katherine A., 1947- II. Wojciechowski, Margot J. (Margot Jean), 1936- III. Queen's University (Kingston, Ontario). Centre for Resource Studies. IV. Title. V. Series.

HD9574.C33B42 1985 333.8'231'097193 C85-098769-5

© Centre for Resource Studies, 1985
Queen's University
Kingston, Ontario

## FOREWORD

The Eastern Arctic Study is a joint project of the Institute of Local Government and the Centre for Resource Studies, both at Queen's University in Kingston. Funding for the study has been provided by the Donner Canadian Foundation.

This paper is one of a series of case studies that was prepared as background material for the Eastern Arctic Study, and which was used to develop scenarios for possible future developments in constitutional change, land claims settlements, local government, and the regulation of mineral development within the claim area of the Inuit Tapirisat of Canada. The opinions expressed are those of the authors, and do not necessarily represent the views of the Donner Canadian Foundation, or of the Institute of Local Government or the Centre for Resource Studies or their sponsors.

Katherine A. Graham
Principal Investigator

CONTENTS

Foreword / iii

Summary / vi

1 Introduction / 1

2 Overview / 4
- The Proponents / 4
- Exploration Activities / 5
- Production Scenarios / 6

3 The Regulatory Process / 9
- Introduction / 9
- The Regulatory Regime up to 1981 / 9
- Planning for Production / 13
- The Beaufort Sea Environmental Assessment Panel Review / 14

4 Consultation Concerning the Beaufort Sea and Emerging Issues / 19
- Interests and Concerns of Communities / 20
- Communities and the Consultation Process / 24
- Local Committees / 25
- Prognosis for BSCAC / 28
- Community Consultation with Government: A Summary / 29
- Government of the Northwest Territories / 29
- Joint Advisory Bodies / 30
- Consultation with Industry / 31
- Dome / 31
- Esso / 32
- Gulf / 32
- The Role of the Committee for Original Peoples' Entitlement in the Consultation Process / 33
- Regional Bodies and Interest Groups / 34

5 The Beaufort Sea Environmental Assessment Panel Review / 36

6 Lessons for the Eastern Arctic Study / 39
- Environmental Impact Issues / 39
- Economic Impact Issues / 40
- Social Issues / 41
- Political Development Issues / 42
- Relevance for the Eastern Arctic Study / 43
- Distinctions Should be Drawn Among Individual Communities / 44
- All Communities Seek to Participate in Some Aspect of Development Planning / 45
- The Present Approach, Especially in Communities Located Near Exploration Areas, Leaves Local Council Over-burdened / 46
- The Potential for Regional Decision Making Requires Definition / 46
- The Complexity of the Current Regulatory and Planning Process in the Beaufort Has Everyone Confused / 47
- The Impact of Land Claims is Possibly Significant but Remains Unknown / 49

Table 1. Eastern Arctic Study Major Case Studies / 2

Appendix I Acronyms Used in the Beaufort Chronology / 51
Appendix II Beaufort Sea Case Study Chronology / 53
Appendix III List of Beaufort Sea Interview Respondents / 67
Appendix IV Bibliography for the Beaufort Case Study / 69

The Authors / 73

The Centre for Resource Studies / 74

Eastern Arctic Study / 75

EAS Publications / 77

SUMMARY

This case study examines exploration for petroleum resources in the Beaufort Sea since the late 1960s. It focuses on the interaction among the three major proponents of development of the area's hydrocarbon resources (Dome Petroleum Limited, Esso Resources Canada Limited and Gulf Canada Resources Inc.), the federal and territorial governments, and communities in the region.

A number of observations emerged as a result of community visits and other research associated with the case:

i Different types of communities may be identified, each type having its own particular kind of relationship to Beaufort Sea development.

The Hamlet of Tuktoyaktuk is a 'base camp' community located right in the centre of exploration activity. As a site for company base camps and transportation facilities, it is subject to considerable demands for services and other development pressures. The Town of Inuvik is a 'service centre' which is important to the Beaufort as a source of supplies. It is also the home base of many government personnel involved with the Beaufort.

Aklavik, Holman and Fort McPherson are just some examples of feeder communities which are more physically remote from the exploration area but do experience employment and related socio-economic spinoffs from the effort.

ii Representing a base camp community, the council of Tuktoyaktuk has been very vocal in expressing its concerns about Beaufort Sea development. These have included:

- the consultation process concerning exploration and subsequent development;
- environmental impacts;
- economic impacts, including both employment and spinoff opportunities;
- the costs of development, such as the burden of providing local services;
- the social and cultural impacts of the influx of southern workers.

iii The Beaufort Sea Community Advisory Committee (BSCAC), a Dome-sponsored group of representing local councils and Hunters and Trappers Associations in area communities has served to inform communities about Dome activities in the Beaufort since 1976. The committee appears to be expanding its range of activities and there may be sustained pressure for the BSCAC or some similar organization to deal with the activities of all companies involved in the region.

iv Federal and territorial government planning and regulatory efforts are complex and have generated varying responses from communities, companies and other interested groups such as the Committee for Original People's Entitlement. The Beaufort Sea Environmental Assessment and Review Process provides a case in point.

Lessons for the Eastern Arctic Study resulting from the Beaufort case study are:

i Distinctions should be drawn among individual communities and their relationship to the development. The different interests of base camp, service centre and feeder communities should be reflected in the involvement of communities in the regulatory and consultative process.

ii All communities affected by Beaufort activities seek to participate in some aspect of development planning.

iii The present approval to planning, regulation and general consultation leaves local councils over-burdened, especially in communities located near exploration areas.

iv The potential for decision making on a regional basis in the Beaufort requires further consideration. Issues related to the future of the BSCAC were a case in point.

v The complexity of the regulatory and planning process in the Beaufort has everyone confused.

vi The impact of land claims on Beaufort exploration and development is possibly significant but remains unknown.

## 1. INTRODUCTION

The overall objective of the Eastern Arctic Study is to examine the implications of constitutional development and of land claims for local government and for mineral development in one particular land claim area, that of Inuit Tapirisat of Canada (ITC). An integral part of Eastern Arctic Study research is a series of case studies. The basic purpose of these is to examine specific instances of past industry/community/and other government interaction concerning industrial development.

Three types of case studies have been prepared. The first looks at specific examples of interaction occurring within ITC's claim area. The Beaufort study is the second, and deals with interaction between companies and communities and other levels of government within the Northwest Territories but outside the ITC claim area. The final group of case studies concerns the industrial development regime established in jurisdictions which have already settled native land claims. By studying existing claim settlements, even in different political jurisdictions, it is possible to identify strengths and weaknesses of particular approaches. Accordingly, the James Bay settlement in Quebec (both Inuit and Cree settlements) and the settlement between the native peoples of Alaska and the United States and Alaskan State governments are being examined. These two cases are being treated as supplementary ones, designed to provide an overview of the particular claims settlement involved and its apparent effects on the interaction between communities and industrial developers in each case.

Four possibilities were considered when selecting cases for study within the ITC claim area and elsewhere within the Northwest Territories. These were:

i cases involving communities with a long history of industrial development activity;
ii cases involving communities with a recent history of industrial activity (e.g. only one major involvement);
iii cases involving communities with a long history of industrial development but which have also experienced a pull-out by industry;
iv cases involving communities where industrial development activity is anticipated in the near future.

Other factors entered into the selection process. For example, it was thought to be worthwhile to investigate any differences between the interaction of the oil and gas industry and firms involved in the mineral industry. Furthermore, differences in company/community interaction re-

lated to exploration activities as opposed to development activities were also thought to be worth considering.

The case studies selected within the Northwest Territories and the ITC claim area are shown in table 1.

Table 1

EASTERN ARCTIC STUDY MAJOR CASE STUDIES

| Case | ITC Area | Community Involvement | Minerals Sought | Development Stage |
|---|---|---|---|---|
| Nanisivik Mine | in | recent | lead and zinc | production |
| Polaris Mine | in | recent & long | lead and zinc | production |
| Baker Lake | in | recent | uranium | exploration |
| Beaufort Sea | outside | recent & long | oil and gas | exploration |

This working paper deals with hydrocarbon development in the Beaufort Sea/Mackenzie Delta region. As seen in table 1, the Beaufort Sea case looks at exploration and production planning for oil and gas in the Northwest Territories, but not in the ITC claim area. The communities which have been identified as being most affected by Beaufort Sea development are Aklavik, Coppermine, Holman Island, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, Artic Red River, Fort McPherson, and Old Crow. These communities are shown on the accompanying map.

Research has involved reviewing relevant documentation, on-site visits, and personal interviews. Documentation concerning exploration activities and operations, and socio-economic, technical and environmental reviews have been received from Dome Petroleum Ltd., Esso Resources Canada Ltd., Gulf Canada Resources Inc., the Government of the Northwest Territories, the federal government, and various consultants.

Community visits have been made to Coppermine, Holman Island, Inuvik, and Tuktoyaktuk, to meet with community councils, representatives from the resource companies, officials from the federal Department of Indian Affairs and Northern Development (DIAND), officials from the Government of the Northwest Territories (GNWT), Beaufort Sea Community Advisory Committee (BSCAC) members, and other interested individuals. Objectives of these community visits were threefold. First, community councils and other interested members of the local community were informed about the Eastern Arctic Study in general, and the Beaufort Sea case study in particular. In some communities, formal presenta-

tions were made to council concerning the Eastern Arctic Study and question and answer sessions followed. Second, interviews were held with members of the local council, local government staff, and other interested parties in each community. Finally, council minutes and other relevant documentation were reviewed to determine the nature of communications between communities, companies and government regarding industrial development.

Other interviews regarding development in the Beaufort Sea/Mackenzie Delta area have been conducted with individuals in Ottawa, Calgary, Vancouver and Yellowknife.

Chapter 2 provides an overview of the case, including a brief summary of the exploration program, and of the production scenarios which have been developed by the three proponents.

Chapter 3 describes the regulatory regime that has been applied to date to exploration activities in the Beaufort Sea, as well as the process that will likely govern future exploration and development.

In chapter 4, the various interests involved in Beaufort development are identified and the nature of interaction among those interests is described. The concerns of each are also summarized with a view to identifying specific issues relevant to the Eastern Arctic Study.

Chapter 5 provides a description of the Beaufort Sea Environmental Assessment Panel Review, and discusses the Environmental Assessment Panel's responses to concerns which have been raised during the review.

In the concluding chapter implications of the findings of this case for the Eastern Arctic Study are examined. A chronology of related events is included as Appendix I.

It would have been impossible to obtain the background material and documentation necessary for this case study without the assistance and goodwill of people in the northern communities, the Government of the Northwest Territories, the federal government, the major resource companies, Inuit Tapirisat of Canada, and others. The Eastern Arctic Study assumes responsibility for any factual errors and for views and interpretations expressed in this paper.

## 2. OVERVIEW

The potential development of petroleum resources in the Beaufort Sea has been the subject of widespread interest in northern and southern Canada since the early 1960s. Although development of hydrocarbon resources in the Beaufort Sea has, in a sense, come to be identified with national issues such as energy self-sufficiency, and economic development, the extent and nature of any such development has become of particular importance for the proponents of the development, governments which seek to regulate it, and other interested organizations and individuals.

### The Proponents

There are three major resource companies now involved in the offshore search for hydrocarbons in the Beaufort area: Esso Resources Canada Limited, Dome Petroleum Limited, and Gulf Canada Resources Inc.

Esso Resources Canada Limited was the first operator in the area, moving north in the mid-1960s from its Norman Wells property, which has been in production since the 1920s. After about seven years of exploration onshore in the Mackenzie Delta, Esso's program moved into the offshore area of the Beaufort Sea in the early 1970s. Since then Esso has made significant contributions to the development of Arctic drilling, construction and logistics technology, particularly in the area of artificial island technology. Since 1972, it has constructed and drilled from 18 artificial islands in the Beaufort Sea in depths ranging from 5 feet of water to about 60 feet. The expenditures associated with such activities are massive; by February 1982, Esso had spent over $600 million on exploration in the Beaufort Sea/Mackenzie Delta region, and drilled 79 wells.

Dome Petroleum operates through its Canadian subsidiary, Dome Canada Limited, which was established in January 1981 to qualify for the benefits available to Canadian-owned companies under the National Energy Program. Drilling operations are run by another subsidiary, Canadian Marine Drilling Limited (Canmar). Dome first applied for offshore drilling permits in 1972, but permission was not received until four years later. Since 1976, Dome has pioneered the use of ice-reinforced drillships in the Beaufort Sea. Many exploratory wells have been drilled, resulting in the discovery of oil at Koakoak, Kopanoar and Tarsiut, and gas discoveries at Ukalerk, and Nektoralik. In 1982 Dome's fleet consisted of four drillships, eight supply vessels, three barges, a cargo carrier and the class 3 icebreaker, Kigoriak. This fleet, together with the company's base facilities, represented an investment of more than $400 million.

Gulf Canada Resources Inc. had been exploring in the region since 1965, focusing its efforts in the early 1970s on exploring the Parsons Lake Gas field from its base at Swimming Point. Following a decision to delay the Mackenzie Valley pipeline in 1977, Gulf ceased to be an operator in the region but participated as a partner with Dome and Esso. With Dome, Gulf shares the Kopanoar and Tarsiut oil discoveries and the Ukalerk gas discovery. Gulf was also a participant with Esso in the Isserk and Issungnak oil discoveries, the latter discovery being located on Gulf operated lands. In 1980, Gulf decided to re-establish its position as an operator in the Beaufort. In June, 1981, Gulf announced its intention to design and construct a $674 million Beaufort Sea drilling system, specifically designed for exploration in the Beaufort Sea. The company has negotiated an exploration agreement with the federal government.

**Exploration Activities**

The search for oil and gas and its accompanying industrial activity is certainly not new to the Mackenzie Delta. In fact, communities in the region had already experienced a great deal of social change and varying degrees of involvement and interest in the wage economy prior to the present spate of activity. Petroleum exploration in the region began in the early 1960s, with seismic exploration and drilling of exploratory wells by various operators. In 1970, Esso discovered oil at Atkinson Point, thereby shifting attention to the offshore. Esso already had considerable experience in drilling from islands in the Mackenzie river, and in 1972 received permission to drill from artificial islands in the Beaufort Sea. Through the existing regulatory process, they began the first drilling in the Beaufort Sea from the artificial island Immerk, in September 1973.

Dome, on the other hand, decided to try a technology unproven in Arctic waters and applied for permission to drill from ships in 1972. They did not receive drilling program approval until 1976, and then only for one year, under what have been called the 'toughest conditions placed on exploration and drilling anywhere in the world'.[1]

More than 130 exploration wells have been drilled since 1972, some on land, some from the 18 artificial islands in the Mackenzie delta and in shallow offshore waters, and 12 from drillships in deeper waters. Ex-

1. Canada, Department of Indian Affairs and Northern Development, Under the Beaufort - Canada Drills in the Arctic, p. 22.

ploration results to date have been encouraging, and have led to the development of a second generation drilling system for year-round operation in ice, and to the development of the artificial island concept as an exploration drilling platform.

Dome's 1981 drilling program discovered structures with a potential for between about 3 and 9.5 billion barrels of oil. However, it has been indicated that only between 15 and 40 percent of this potential would be recoverable with existing technology.[2]

Key dates in the exploration for petroleum in the Beaufort Sea can be summarized as follows:

| | |
|---|---|
| early 1960s | Esso Resources becomes the first operator in the Beaufort Sea Area. |
| 1965 | Gulf also becomes active. Gulf drills the first well in the Mackenzie Delta. |
| 1970 | Esso strikes oil at Atkinson Point thereby shifting attention to the offshore. |
| 1972 | Dome applies for its first offshore drilling permit. |
| 1973 | Esso begins first drilling from an artificial island. |
| 1976 | Dome receives its first offshore drilling permit<br>Gulf halts its independent exploration program and collaborates with Dome. |
| 1980 | Gulf announces its intention to resume more active role in Beaufort exploration. |
| 1981 | Dome completes major base camp at Tuk. |
| 1972-81 | 130 exploration wells drilled in Beaufort Sea area. |

**Production Scenarios**

In their document entitled 'Hydrocarbon Development in the Beaufort Sea-Mackenzie Delta Region' the three proponents describe oil production scenarios for the area, for both the medium and the long-term. Between 1981 and 1985 (the pre-production period), they anticipate drilling about 30 offshore exploration and delineation wells, from both ships and artificial islands. If an economic oil pool is discovered, about 15 development wells will also be drilled. For transportation, two possibilities have been proposed: construction of an offshore tanker terminal and one Arctic tanker, or the beginning of a pipeline down the Mackenzie Valley, with an onshore terminal on the north coast.

2. Northern Miner, vol. 67, no. 36, p. 1.

In the early production phase (1986-1990), the proponents expect to drill 40 more exploration and delineation wells, plus about 160 offshore production wells. Nine new artificial islands would be needed in shallow waters, along with one deep-water development island. During this period, production could reach 500,000 barrels of oil per day. As a result, transportation would require either one artificial deep-water Arctic Production and Loading Atoll (APLA) and eleven tankers, or two sub-sea pipelines linked to the Mackenzie Valley pipeline.

Beyond 1990 the projections become less detailed, but up to 400 production wells are envisaged, yielding production levels that could exceed 1 million barrels per day.

Associated gas (i.e. gas associated with oil production) will be used initially as fuel at the production site with any surplus being flared for a short period of time. In later years, the associated gas may be treated and re-injected into the reservoir for conservation and reservoir maintenance purposes.

It is projected that a gas transportation system will be in place by about 1992, at which time the associated gas could be transported to market with non-associated gas from other fields should this prove to be economic. The rate of development will be influenced by prices, markets, and availability of transportation facilities. Gas could be moved to markets by pipeline or in ice-strengthened LNG tankers.

The development phase will include the drilling of production wells, the installation of production facilities and the provision of transportation systems for moving oil and gas to markets. Industry expects to build and operate the production facilities and to assist governments in the planning, building, establishment and operation of the social infrastructure. Major production infrastructure components include floating platforms, offshore production platforms, artificial islands, dredges, hydrocarbon transportation systems (including Arctic Production and Loading Atolls), Arctic tankers, pipelines and shore bases. The social infrastructure includes base camps, communities, community services, transportation and communication services, schools and training facilities.

At present, McKinley Bay is used as an overwintering site for Dome's drillships and support vessels. Beyond 1981 it is expected that McKinley Bay will be transformed into a full-scale support base for year-round offshore operations. Meanwhile, Tuktoyaktuk is the major support base and transshipment point for offshore operations. It will likely continue to be used as a shallow draft seasonal supply base and as a year-round field office in support of the offshore effort.

A labour force much larger than can be provided by the local population will be needed to build and operate all of the projected facilities. It has been estimated that during the peak construction per-

iod, about 12,000 workers would be employed on pipeline construction, logistics, and at camps north of 60. The population of some communities, particularly Inuvik and Tuk, would increase considerably by 1990, with a resultant increase in opportunities for local businesses and employment in the service industries.

## 3. THE REGULATORY PROCESS

### Introduction

The objectives of the Beaufort case study can be summarized as follows:

i to describe the interaction between companies, communities and other levels of government in the Beaufort Sea area;
ii to define the issues emerging from this interaction and from other sources;
iii to identify lessons to be learned from each issue concerning approaches to industrial development and local involvement in that development.

A prerequisite to meeting these objectives is an understanding of the complex regulatory regime that has been applied to date to exploration activities in the Beaufort Sea, and the regime that will govern future exploration and development. It is difficult and somewhat artificial to distinguish between regulation of exploration and of development in the Beaufort. The maintenance of a drilling program (exploration) seems to be an inherent part of developing the oil and gas reserves in the area. Nonetheless, 1981 appears to have been a watershed year with the emergence of new legislation, Bill C-48, and initiation of a comprehensive environmental assessment review of Beaufort development under the federal Environmental Assessment Review Process (EARP). Accordingly, the regulatory regimes for exploration and development up to 1981 and from 1981 onward will be discussed separately.

### The Regulatory Regime up to 1981

A major problem facing both Beaufort Sea developers and communities is the plethora of government departments and agencies involved in the regulation of hydrocarbon activities and the ad hoc nature in which these regulatory processes have been developed. This represents one of the major issues arising from the Beaufort case study and will be explored further in Chapter 5.

As early as 1965, the federal government began to issue exploration permits designed to encourage the petroleum industry to explore for hydrocarbons in the Beaufort Sea/Mackenzie Delta region. In order to retain the permits, companies were required to spend a certain amount of money per acre each year. By the end of 1969, nearly 400 million acres

of the Northwest Territories mainland, Arctic Islands and offshore waters were under permit for oil and gas exploration.[3]

As the search for oil and gas moved north, the many environmental risks involved in exploration became apparent, and government began to develop new and more stringent regulations for drilling to ensure protection of both the environment and the people. Oil and gas seismic and drilling activities on land (including artificial islands) had been subject to the federal Territorial Land Use Regulations since 1971. These regulations established a permit procedure for land use operations likely to have environmental impacts. The permit system was designed to regulate land use activities which explore for natural resources, and subjects the permittee to an extensive list of conditions relating to the timing of various activities, type and size of equipment to be used, pollution prevention measures, etc. In 1976, the regulations were revised, and extended to cover all explorations operations, large or small. Consultations with communities that might be affected by the work became a part of the issuing process. This regime continued until 1982.

The announcement of the National Energy Program in October of 1980, however, made it essential that the federal government bring its legislation into line with current requirements.[4] Consequently, under Bill C-48, the new Canada Oil and Gas Act, proclaimed in March 1982, the Canada Oil and Gas Lands Administration (COGLA) is responsible for regulating oil and gas exploration and development on Canada Lands.

COGLA combines staff from both DIAND and EMR, under one administrator who reports to the deputy minister of EMR concerning east and west coast development and to the deputy minister of DIAND for developments north of 60. COGLA's mandate includes: disposition of Canada Lands for oil and gas development; negotiation of new exploration agreements with companies; granting of permits for specific drilling work; application of the federal royalty regime; and negotiation of the government 25-percent back-in rights.

An exploration agreement is now the basic instrument by which oil companies hold oil and gas rights to explore on Canada Lands, and is required before any work is undertaken. In order to obtain an agreement, an applicant must submit a plan outlining the specific nature and

---

3. Under the Beaufort - Canada Drills in the Arctic. In 10 years, however, this was reduced to 180M acres, as companies started to focus on the Beaufort Sea and delta regions as being the most promising.
4. Details of the regulatory regime found in Proceedings of the Special Committee of the Senate on the Northern Pipeline, Tuesday June 22, 1982, Issue No. 31.

timing of the exploration activity (seismic, drilling, environmental research, etc.) which will be undertaken. Details of the agreement are negotiable, but must be agreed upon before an agreement will be granted. (Although this plan must be reviewed by COGLA, the Interdepartmental Environmental Review Committee of DIAND and the Resource Evaluation, Engineering and Control Committee of COGLA will both play a major role in its approval.)

The first such agreement under the new regime was announced on 10 May 1982 in a joint statement by the ministers of DIAND and EMR.[5] Under the agreements[6] Esso Resources Canada Ltd. and 10 Canadian companies will participate in a $600 million exploration program over the next 5 years in the Beaufort Sea-Mackenzie Delta region. Esso will farm out a major portion of its own lands to 10 Canadian comanies with Home Oil Co. Ltd. acting as the operator. Esso will drill a minimum of five offshore wells and four onshore wells, while the Canadian companies could drill up to 12 offshore and seven onshore wells in a five year period. The Canadian companies would be allowed to take an interest in all of Esso's land under the exploration agreements if they fulfill their obligations in the period.

The exploration agreement, however, is but the first step in the lengthy process which regulates oil and gas activities. A plan for the employment of Canadians and for the use of Canadian goods and services must also be submitted and approved prior to the commencement of any work. The plan must contain three major components: an industrial benefits plan, a manpower development plan, and a northern benefits plan. Included in the northern benefits plan must be an outline of how information and consultation activities will take place in the affected area, the provision of training and employment opportunities to northern residents, the provision of business opportunities for northern businesses, the potential impact on community infrastructure, social and cultural issues of relevance to northern residents, sensitivity to the role of renewable resources in northern life and any other issues which affect northerners. The actual activities which will be undertaken must be set

---

5. The Globe & Mail, 11 May 1982
6. The agreements, covering 6 exploration agreements between Esso and the federal government encompasses 6 million acres of land, replacing existing rights held by Esso before the new legislation took effect officially in February. At present the entire acreage is shared 86 percent by Esso and 14 percent by Petro-Canada. Under the legislation, all companies with existing rights on frontier lands must give up 50 percent of their acreage. Thus, after the third year Esso must relinquish 25 percent of the acreage and another 25 percent the fourth year.

out in an annual action plan which will be reviewed by interested parties and approved by the Minister. Performance will be monitored by means of an annual review.

For example, every year since 1977, Dome Petroleum has signed socio-economic agreements with the federal government, outlining Dome/CanMar's 'Action Plan' for the coming season. The Action Plan consists of programs in the areas of northern employment and training, use of local services and businesses, social and cultural considerations, information and communications, and further developments. Specific aspects of these agreements are negotiable with the GNWT.

Technical aspects of oil and gas operations are regulated by The Oil and Gas Production and Conservation Act (which is administered by COGLA). The Act, as amended in 1982, now requires that any company undertaking exploration or development activity have an Operating License and a prior written authorization for each activity. The mechanics of the approvals will be determined by forthcoming regulations, but the authorizations will be subject to the submission of the same Canada Benefits Plan as required for the exploration agreement. The Oil and Gas Drilling Regulations, promulgated in 1979, pursuant to the Oil and Gas Production and Conservation Act require a Drilling Program Approval for all offshore wells and a Drilling Authority for all wells drilled below 152m (500 ft.).

As mentioned earlier, a drilling authority is required for every well drilled below 152m. Prior to 1981, companies received annual drilling permits, and annual information on depletion allowances. These conditions are now established on a three-year basis, which may be more advantageous to both companies and communities since the annual review tended to overload the consultation process. It should be noted, however, that in the case of drilling from ships in the Beaufort, there is still an annual review of operations which must be submitted to Cabinet.

Land use in the Arctic is regulated by the Territorial Lands Act and the Land Use Regulations which are important for environmental and resource management. If drilling is to take place on land or from an artificial island, the applicant must obtain both a land use permit and a land tenure (lease) agreement. The permit system is designed to regulate land use activities involving exploration for natural resources; if drilling is to be from a ship, the applicant need not worry about these requirements. Land use permits set environmental protection conditions under which the land may be used, and are divided into either 'A' or 'B' permit types, depending upon the degree of environmental disturbance likely to result from the activity, or the extent of time required for the land use activity. Stricter conditions are usually applied to Class 'A' permits, and in practice, virtually all drilling applications fall into this category.

The permittee is subject to a comprehensive list of permit conditions, relating to such things as timing of operations and type and size of equipment that may be used. The Land Use Advisory Committee (composed of representatives from the federal departments of Indian Affairs and Northern Development, Environment and Fisheries and Oceans, and the GNWT Departments of Local Government and Renewable Resources), plays an important advisory role in the granting of Class 'A' permits. It provides expert advice on the environmental and operating conditions deemed appropriate for a particular permit, and may undertake additional environmental assessments before submitting its recommendations. It is policy to solicit the opinion of nearby communities about the proposed land use activities under Class A permits.

Use of fresh water for land-based activities is regulated by the Northern Inland Waters Act. Water licenses are issued by the Northwest Territories Water Board, but must be approved by the Minister of Indian Affairs and Northern Development. The formal licensing procedure is used for large scale water use applications and involves public hearings and environmental assessments. Terms and conditions may be attached to the licence. On the other hand, only an 'authorization' is required if water use will not exceed 50,000 gallons per day, or if the proposed use of water will not exceed 270 days.

The preceeding paragraphs describe the legislative provisions which apply directly to northern hydrocarbon development. Companies must satisfy these requirements in order to undertake their various activities. A brief perusal of the process indicates that the majority of interaction occurs between industry and government. Very little formal government-community interaction is provided for, and virtually no industry-community consultation is required at all. Any industry-community consultation is purely voluntary on both parts. This raises an important issue which also emerged in the Polaris case study: how to establish an approval process which provides for the consideration of socio-economic and environmental issues by all interested parties, and yet, at the same time, preserves incentive for industrial concerns to pursue development. The involvement of communities in the approval process for Beaufort Sea exploration and development is discussed further in chapter 4.

**Planning for Production**

It should be noted that although the regulatory regime for the exploration and development of hydrocarbons was firmly established with the passage of Bill C-48, to date there have been no development activities

in the Beaufort Sea/Mackenzie Delta area.[7] In fact, the final decision as to whether or not production of Beaufort hydrocarbons will be allowed to proceed, has not yet been taken.

The federal government has, however, started to plan for production in the Beaufort area, by implementing certain mechanisms of review and control of actual production activities. Two of these, the Beaufort Sea Environmental Assessment Panel (BSEAP) Review, and the comprehensive planning regime announced by the Minister of Indian Affairs and Northern Development, in July 1981, are outlined below.

**The Beaufort Sea Environmental Assessment Panel Review**

In light of the significant activities by industry in the Beaufort Sea/ Mackenzie Delta region, and the possibility of reaching the production phase in the very foreseeable future, the Minister of Indian Affairs and Northern Development referred the development to the federal Environmental Assessment and Review Process (EARP) in July of 1980. Industry is hoping to receive environmental and socio-economic approval-in-principle as a result of the review.

The EAR process was established 'to ensure that federal departments and agencies take environmental[8] matters into account throughout the planning and implementation of new projects, programs and activities; carry out an environmental assessment for all projects which may have adverse effects on the environment before commitments or irrevocable decisions are made (projects which may have significant effects have

---

7. In fact, to date, COGLA has had only one occasion to approve the completion of one development project under the new regime. The Norman Wells expansion project has been granted all necessary approvals: these include Drilling Program Approval, Development Plan Approval, Production Structures Approval and Production Facilities Approval. Other minor approvals associated with the production aspects of the project have also been granted.

   Nonetheless, many policy issues relating to the approvals process for development proposals remain to be resolved. The task of resolving them will be undertaken by COGLA, in close collaboration with the concerned government departments and agencies and with industry as well. According to the Sept. 14, 1982 COGLA presentation to the Special Committee of the Senate on the Northern Pipeline, many details of the approvals process and related policy issues will be refined as the need arises and will likely vary from one project to the next.
8. 'Environmental' matters include socio-economic considerations as well physical impacts.

to be submitted to the Federal Environmental Assessment Review Office for formal review); and use the results of these assessments in planning decision-making and implementation'.[9] Departments and agencies are responsible for assessing the environmental consequences of their own projects and activities, or of those for which they assume the role of initiator.

If it is recognized that potentially significant environmental effects may be involved, the initiator must request the executive chairman of the Federal Environmental Assessment Review Office (FEARO) to establish a panel to review the project. Once the project has been submitted for panel review, it may not proceed until the review is completed and recommendations are made to the Minister of the Environment, as the Minister responsible for the EAR process and, in the case of the Beaufort, to the Minister of Indian Affairs and Northern Development, as the initiator of the process.

In June of 1981, draft guidelines were issued by the Beaufort Sea Environmental Assessment Panel (BSEAP) for the preparation of an Environmental Impact Statement (EIS). At approximately the same time, the proponents released a document entitled 'Hydrocarbon Development in the Beaufort Sea-Mackenzie Delta Region' which describes various development scenarios in the region up to the year 2000.

Public meetings were held in the fall of 1981 in various northern communities, for comments on the draft guidelines, and the final guidelines were subsequently released in late February of 1982. The guidelines identify both general and specific issues which must be addressed by the proponents in their Environmental Impact Statement.

In September of 1981, approximately $325,000 in federal funds was allocated to assist interested parties, or intervenors, in making presentations to the BSEAP hearings. A further $292,500 was allocated in mid-1982 to cover the period April 1982 to March 1983. Among the applicants for these funds were the community councils of Arctic Bay, Inuvik, Pangnirtung, and Tuktoyaktuk, the Beaufort Sea Community Advisory Committee, the Natsiq Advisory Committee (a community committee from North Baffin), the Beaufort Sea Research Coalition (composed of the Canadian Arctic Resources Committee, the Arctic International Wildlife Range Society, the Canadian Nature Federation, Energy Probe, and the Yukon Conservation Society), the Greenpeace Foundation of Canada, the Canadian Wildlife Federation, the Metis Association of the NWT, the Dene Nation, ITC, the Committee for Original Peoples' Entitlement (COPE), Council for Yukon Indians, and The Old Crow Band Council.

---

9. Land Use Programs in Canada, Northwest Territories, p. 112.

Panel hearings were held in Beaufort communities in 1983. The final report was originally scheduled to be released lter in 1983.

## The Comprehensive Northern Land-Use Planning Regime

A new policy on comprehensive northern land use planning was announced by John Munro, Minister of DIAND, in July 1981. The proposed regime follows to a large extent the terms set out in the COPE Agreement-in-Principle.[10] Responsibility for planning and implementation will rest with DIAND. However, the division of responsibilities between the Canadian Oil and Gas Lands Administration (COGLA), and the new land use planning regime is still uncertain.

In its conceptual stage, it is planned that the system will be composed of three basic components: a planning process, a policy framework, and an organizational structure. The planning process will be sequential, and consist of five basic steps: plan initiation, resource inventory and analysis, plan preparation, plan implementation, and monitoring and review.

The policy framework is to have three levels: the first will set out federal government policies and objectives as to how northern land resources are to be managed; the second will set out territory-wide land use objectives, and the third will set out specific requirements for each designated planning area.[11]

The organizational structures are to be set up as follows: the first level, the Northern Land Use Policy Committee, will be composed of both federal and territorial officials. This committee will be chaired by DIAND, but its exact composition was not determined in 1982. Its functions will be to develop program objectives, set priorities for planning, and to provide direction for the initiation and conduct of northern land use planning. This committee will be supported by the DIAND Land Use Planning Branch.

Second, a Land Use Planning Commission will be established in each territory, consisting of a Land Use Coordinating Committee (composed of

---

10. On October 31, 1978, the Government of Canada and the Committee for Original Peoples' Entitlement (COPE) concluded an agreement-in-principle to settle the land claim pursued by COPE in the Western Arctic. Aside from initiatives such as the comprehensive land-use planning regime described above, the future of the Agreement-in-Principle is currently in doubt.
11. DIAND press release, 30 July 1981.

representatives from federal and territorial governments, as well as native organizations), and a DIAND Planning Secretariat (the technical component, which will be comprised of planners and resource specialists). The Coordinating Committee will interpret policy, set local objectives, coordinate operational requirements and direct the operation of planning in the territory. The Planning Secretariat will carry out planning within the territory, and within the objectives set out by the first level.

The process at the local level has not yet been clearly defined.[12] However, there will be some sort of forum for public input, such as a Planning Area Review Panel, which will have representation from local authorities, native associations, industry and others. As well, a Land Use Planning Team drawn from the Land Use Planning Secretariat staff will be assigned to plan at the local level.

This land use planning regime will operate through the Territorial Lands Act and other pieces of federal legislation.

The program to implement the land use policy has not yet been finalized. It is expected that the process will be determined early in 1983.[13]

## Other Government Actors

In 1981, DIAND also set up a new body, the Beaufort Sea Office (BSO) which was established to improve the coordination and delivery of the federal government's responsibilities with respect to hydrocarbon development in the Beaufort Sea region. This office was also to review:

i the existing regulatory requirements and review mechanisms;
ii government infrastructure, training and other needs related to Beaufort Sea development; and
iii identification of major research and data gaps that must be addressed if government is to adequately judge any industrial application.

---

12. At least one municipality, the town of Inuvik has requested to be directly involved in the land use planning regime, but the response from COGLA and the GNWT has been less than satisfactory in the view of the local political leadership.
13. A study commissioned by the Northern Affairs Program of DIAND and undertaken by DPA consultants, Preliminary Planning for the Implementation of Comprehensive Land Use Planning in the Yukon and the Northwest Territories (December 1981) recommends an organizational approach, and proposes an action plan and a schedule to establish comprehensive land use planning in Northern Canada.

The BSO was not to be involved in regional planning or in regulatory activities. At the time of its establishment there was considerable uncertainty concerning the role that the BSO would play. This uncertainty may have contributed to the demise of the BSO in 1982.

Looking further into the future, public hearings will also be held before the National Energy Board (NEB), assuming that export permits are required for oil and gas, and interprovincial pipelines form part of the development. These will allow further opportunity for community and northern input. The availability of funds for northern participation in such hearings will likely be an important influence on the extent to which communities do become involved.

The recent nature of federal initiatives concerning the production of Beaufort Sea hydrocarbons makes it difficult to assess their specific implications for the interaction between affected communities, companies and other levels of government. Nonetheless, some trends are emerging. These relate to the form or process of interaction and to the nature of issues raised by Beaufort communities in their dealings with the proponents of Beaufort development. The nature of the regulatory process is important because, to a large extent, it determines the nature of interaction and the issues raised. However, as the next chapter of the Beaufort study illustrates, this is not exclusively the case.

## 4. CONSULTATION CONCERNING THE BEAUFORT SEA AND EMERGING ISSUES

This chapter attempts to identify the various interests involved in discussions about the evolution of development in the Beaufort Sea area. It distinguishes the interests of the proponents of Beaufort Sea exploration and development, the federal and territorial governments, individual communities and community groups, and other interests and identifies the nature of interaction among these parties. It also summarizes the concerns of each with a view to identifying specific issues relevant to the Eastern Arctic Study.

Most often interaction occurs and concerns become articulated during a process dubbed 'consultation'. Consultation is a tired word in Canada's north and the process itself is a major issue. In considering the purpose and effectiveness of consultation, the following issues must therefore be addressed:

i the meaning of the word 'consultation' and the original purpose it is meant to serve;
ii the relevant parties included in the consultation process;
iii the possible results of consultation for the various parties involved.

Because the focus of the Eastern Arctic Study is on industry and other government interaction with communities and local governments on the subject of industrial development, it is appropriate to examine community consultation in the Beaufort Sea area. To a considerable degree, the process of community consultation cannot be described or appreciated without reference to the approach taken by companies and other levels of government in that process. Thus, description of their approach to the community consultation process is included in the portion of this chapter dealing with local communities and community-based organizations. Nonetheless, separate sections on other governments and companies are required and included for discussion.

The communities originally identified as being most affected by Beaufort Sea oil and gas development were Aklavik, Coppermine, Holman, Inuvik, Paulatuk, Sachs Harbour and Tuktoyaktuk. Members of the Eastern Arctic Study made community visits to Coppermine, Holman Island, Inuvik and Tuktoyaktuk. During those visits, meetings were held with community councils, representatives from resource companies, officials from the federal Department of Indian Affairs and Northern Development, officials from the GNWT, Beaufort Sea Community Advisory Committee members, and other interested individuals. These meetings proved

to be of great value in obtaining the information and observations which follow.

Another source of information on community data was the set of transcripts made during the public meetings held in the fall of 1981, as part of the Beaufort Sea Environmental Assessment Panel Review (BSEAP Review). These meetings were held to discuss the draft guidelines for the Environmental Impact Statement, and will be dealt with in greater depth later in this chapter. It became clear during the review of those transcripts that the communities of Old Crow, Fort McPherson and Arctic Red River should be included in any discussion of the impact of development on communities.

As in the Polaris Case Study, different types of communities may be identified, each type having its own particular kind of relationship to the development.

The first is the 'base-camp' community and is represented by the Hamlet of Tuktoyaktuk. Tuk is located right in the centre of oil and gas exploration activities in the Mackenzie Delta. Both Esso and Dome have base camps and supply depots in or adjacent to the community and Gulf is in the process of constructing a base camp. There are also major transportation facilities, particularly those of Northern Transportation Company Ltd. (NTCL), which brings barges up the Mackenzie River.

The second type of community is the 'service centre' and is represented by the Town of Inuvik. Both the Mackenzie River barge route and the Dempster Highway link it with southern Canada, making it an important supply base and transportation centre. It also has direct flights to Edmonton and Yellowknife and connections to Vancouver, Winnipeg and Toronto. Its contacts with the south and with both industry and government are the most extensive of any of the Beaufort communities.

The third type of community, the 'feeder community', is located much further away from the development, and the major impacts will likely relate to employment and other economc spinoffs, rather than to the environment. Examples of feeder communities are Aklavik, Coppermine, Holman, Paulatuk, Sachs Harbour, Old Crow, Fort McPherson and Arctic Red River.

**Interests and Concerns of Communities**

Because of the proximity of Tuktoyaktuk to the drilling activities, the concerns of council with development have been particularly broad and intense. Among the areas of concern are the following:

i the consultation process itself, particularly with industry;
ii environmental impacts;
iii economic impacts, including both employment and spinoff opportunities, and the costs of development, such as the burden of providing local services;
iv the social and cultural impacts of the influx of southern workers.

Consultation with industry has taken two main forms in Tuk. The first, with Dome only, is through the Beaufort Sea Community Advisory Committee (BSCAC). (This Committee is described in detail later in this chapter.) The second, and much more satisfactory in the view of the council, has been direct contact between the companies and the council. Because of the proximity of the Esso and Dome base camps to Tuk, the community's need to rely on the BSCAC for information has lessened. Delegations from these two companies have met regularly with the Tuk council for several years. This method of consultation/communication seems to have been satisfactory for Tuk, because the council is able to directly express its concerns to industry, particularly on environmental and employment matters. On the other hand, the Tuk Council has expressed reservations about the BSCAC and has withdrawn its membership from the committee on two occasions. The first withdrawal was triggered by the feeling that the BSCAC was taking positions on environmental matters that related exclusively to Tuk's immediate geographical area, and were in Tuk's view, of little or no concern to the other six communities and hence should not be matters for BSCAC consideration. Tuk was persuaded to rejoin when its council was given two positions instead of one on the committee. This was in addition to the one position awarded to the local Hunter's & Trapper's Association (HTA). In August 1981, less than a year later, council insisted, by a vote of three to two[14] that its two representatives resign, citing the BSCAC's evolution from an information body to a policymaking body, and objecting to its application for funds to make a submission to the BSEAP hearing.[15]

Additional reasons for reservations about the BSCAC were reported by Tuk officials. They feel that the committee is controlled to an unacceptable degree by its staff. The volume of paper presented at each meeting is large, and in many cases beyond the capacity of committee

14. Tuktoyaktuk Council Minutes, August 19, 1981.

15. The counter-agrument to this, made by a BSCAC official, states that the BSCAC has never proposed to make a submission to the BSCAP, but did initiate a program to assist member communities to make their own submissions.

members to absorb and vote upon during the course of a meeting. It has also been suggested that the committee has become so involved in long-term proposals and in studying other jurisdictions, such as the North Sea, that it has lost touch with matters of immediate concern such as employment opportunities and the location of drill ships. It should be noted however, that Tuk rejoined the BSCAC in 1982.

Environmental concerns of the community seem to be related primarily to the effect of the artificial drilling islands on the sea ice. Winter hunting is traditionally conducted on the ice, and there is concern that the islands, as well as winter roads and drilling activities, will affect hunting activities. Oil spills are also of concern, both on a small scale in the Tuk harbour from shipping activities, and on a large scale in the drilling areas.

Employment of Tuk residents in the oil and gas industry is seen as a positive benefit to the community. Council is also interested in promoting economic spinoff benefits for supporting services. It was not, however, as of September 1981, interested in any joint venturing in primary activities such as drilling and base camp operations. This appears to stem from a fear that the community's independence might be jeopardized by close collaboration with the proponents. Joint ventures with other communities are also of no interest, according to several officials.

The increased demand on municipal services such as sewage, water supply, and roads represents a considerable economic burden for the community. Community resources such as gravel are also in short supply. Although the oil companies have provided considerable assistance, Council feels that it is still carrying too much of the burden.

Social impacts resulting from development are being strongly felt in Tuk. Although there are no legal liquor outlets in Tuk, the availability of liquor in the community is becoming a serious problem. Council has asked that all camps follow Dome/Canmar's lead in prohibiting alcohol.

In order to preserve as much as possible of traditional culture and lifestyle, Tuk has been able to segregate itself somewhat from southern employees. It has also required that limits be placed on the size of the camps in its vicinity.

The town of Inuvik experienced an economic boom in the 1970s due to expectations of the Mackenzie Valley pipeline construction. This boom ended abruptly following the Berger hearings, and the subsequent decision to delay construction of the pipeline by at least 10 years. The community has survived as a regional government centre, but its entrepreneurs are anxiously awaiting new economic prospects. The town council supports industrial development which it considers to be in the interests of the town and to be acceptable in the sense that its negative effects are minimized. In January 1981, for example, council decided to

write to several oil companies expressing the fact that 'Inuvik was interested in any new developments in the area and would be willing to offer any reasonable assistance for those companies to locate in Inuvik'.[16] It should be noted, however, that supporters of COPE and the Dene Nation in Inuvik form a minority group which is not in full support of development. Reservations regarding development and a desire to play a role in controlling development stem from at least three sources. The first is their wish to delay development until the question of ownership of land and resources is settled through land claims negotiations. The second involves their concern over the potential environmental damage resulting from development, which could interfere with hunting and trapping activities. Third, they are aware that development will bring more southerners, and further reduce the control of native northerners over their lives and their environment.

Despite these reservations, economic opportunities arising from development are being actively pursued. For example, COPE has extensive business and equipment contracts with Dome and has established the Inuvialuit Development Corporation. The Dene Band Council in Inuvik is planning to form a development corporation as well. It can be seen that native organizations are seen as an important vehicle for the expression of native viewpoints regarding development.

It is possible to generalize, to some extent, about the interests and concerns of the feeder communities. Sachs Harbour, Paulatuk and Holman tend to share many of the same interests and concerns since they are small coastal communities that depend heavily on traditional hunting and trapping activities. Their concerns relate primarily to the potential for environmental damage that would arise from blowouts, oil spills, and disturbance of ice conditions. They are, however, very interested in employment opportunities which may be available to them. Unfortunately, there are few local businesses to take advantage of spinoff opportunities.

Coppermine, on the other hand, has refused to become involved in environmental issues related to the Beaufort because it considers itself too far away to be affected, and that only communities directly affected should have a voice in such issues.

The economy of Coppermine is based on a mix of traditional hunting and trapping, local construction, small businesses and outside wage employment. Thus, the concerns and interests of the present Coppermine Hamlet Council (which appears to be strongly pro-development) in the Beaufort development revolve almost exclusively around employment and economic spinoff benefits.

---

16. Inuvik Council Minutes, 13 January 1981.

**Communities and the Consultation Process**

The complex regulatory regime which governs hydrocarbon activities was described in some detail in chapter 3. In this chapter, the focus is on how communities are involved in the formal regulatory process. Concerns about the consultation process have been identified in interviews with community leaders and reviews of council minutes. Approval processes have been established for issuing land use permits and water licences for exploration and development activities, and affected communities must be consulted during these processes. The Inuvik office of DIAND coordinates consultation with respect to land use permit applications between the proponents of the development and residents of Sachs Harbour, Holman Island, Paulatuk, Coppermine, Tuktoyaktuk, Inuvik and Aklavik. The vast majority of the permits, however, apply to the area around Tuk, and this has become somewhat of a burden to the Tuk Council, which, in addition to being virtually snowed under with requests for consultation on bits and pieces of development, must find the time to deal with community business.

In order to alleviate this problem, Tuk Council decided in early 1981 to deal with land use applications only every six months, in June and December. There was some concern that the 42-day limit for consideration of land use permit applications might be a problem, but Dome and Esso spokesmen have indicated that their companies should be able to time their submissions to fit the Tuk schedule. As this action suggests, the Tuk Council is frustrated with its role in the decision-making process. Although the companies and the federal government have consulted extensively with the Council, this consultation has simply been a means of disseminating information about proposed activities. The Tuk Council would prefer to be able to exert some influence in the actual planning and decision-making process.

The Town of Inuvik has also expressed a great deal of frustration and concern about the consultation process. The town specifically objected to the absence of formal provision for municipal government participation in the BSEAP review. In its presentation to the Beaufort Sea Environmental Assessment Panel, the Council stated:

> 'As events progress and plans are made it is necessary that northerners be an active part of the planning, negotiating and decision-making process. Presently there is little participation in a meaningful way....At the present time it appears that the government through the Panel, wishes to hear northern concerns, but has not given northerners the tools to be significantly involved. There is need to have a municipal level input as the municipality ensures representation at the community level. Because municipalities have different res-

ponsibilities, distinct from the federal and territorial governments, it is important that they be involved at all stages of planning, deciding and implementing the process of northern development....'

Feeder communities are consulted the least frequently of all. Concern has been expressed by the Holman Council, for example, because it feels powerless in its dealings with industry and with government. Although consultations occur, community concerns are not usually reflected in subsequent decisions. As mentioned earlier, Tuk is the community which is generally most interested in the specifics of development because it is often the closest community to the physical presence of development. Thus, DIAND tends to attend community meetings in Tuk. However, in the case of feeder communities, the DIAND presence seems to be much less regular. In fact, DIAND sometimes relies on the BSCAC as its source of information about community concerns from communities other than Tuk.

In 1977, a federal official visited Holman and explained the role of DIAND as an issuer of land use permits. He made a commitment at that time to inform local people of any land use permit applications. However, applications are apparently sent by mail, and local people report that they have been known to arrive after the activities are already underway. The feeling of powerlessness is accentuated by the reputed brevity of the visits made by some developers who tend to make fly-in visits lasting only a few hours.

## Local Committees

In at least two communities, initiatives have been taken to cope with development proposals that come before them. For example, a Joint Planning Committee has been established in the Hamlet of Tuktoyaktuk to consider development proposals that come before council. Membership in 1980 included all hamlet councillors, the three Tuk representatives on the BSCAC (two from council, one from the HTA), the president of the HTA, the president of the Chamber of Commerce, the Western Arctic member of the Legislative Assembly, the regional directors of the GNWT and of DIAND, and a representative from Dome/Canmar. In 1981 this committee became the Major Development Planning Committee, and Esso, Gulf, Arctic Transportation Ltd. and others were invited to join the deliberations. The committee was established mainly for communication purposes, however, and decisions are still made by the council.

The Inuvik Town Council established a Petroleum Planning Committee (now called the Inuvik Planning Task Force) early in 1981. This

committee was designed to be an economic planning group with particular emphasis on participation by Inuvik in economic activities relating to any developments which affect the Town (including resource development, energy alternatives, tourism, etc.). Members and participants include members of the council, representatives from Dome, Esso and Gulf, the BSCAC information co-ordinator, and other interested parties, including representatives from the communities of Fort McPherson and Arctic Red River. Among the matters under consideration by the committee in 1981 were Dome's proposal for the Beaufort Support Services Facilities (which would give communities a financial interest in Dome's base camp and support services), proposals by Esso and Gulf with respect to their programs and operations, and the economic impact study commissioned by DIAND, as part of its regular socio-economic review and conducted by the GNWT.

An initiative undertaken by Dome was the establishment of the Beaufort Sea Community Advisory Committee (BSCAC) in 1976. The BSCAC is composed of representatives from the communities of Aklavik, Coppermine, Holman, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, and Fort McPherson. There are two members appointed by each community, one who usually represents the local council, and the other who represents the local Hunters and Trappers Association. (As of 1980, however, Tuk was given an extra seat on the committee.) There is also an open invitation for a COPE representative to join the committee.

The BSCAC provides a link between Dome/Canmar and the Beaufort communities. It is funded by Dome and meets with local people to relay information about the exploration program. It reviews the company's activities and receives feedback from the communities on their ideas and concerns. Community tours are organized to provide a direct contact between the residents of the communities and BSCAC members and an exchange of information on Beaufort developments and community concerns about these developments.

Committee activities relate to the social, economic and environmental aspects of Beaufort Sea offshore exploration. There are at least four scheduled meetings each year: a summer meeting in Tuktoyaktuk; a fall meeting held in association with a community tour; a winter meeting to review the past year and plan for the coming year; and a spring meeting held in association with a community tour. A typical meeting will cover current Beaufort activities, possible future activities, employment, local business involvement and environmental protection. Therefore the role of the BSCAC has been interesting and is perhaps illustrative of the potential for the committee to perform an advocacy role.

The BSCAC has also become involved in the Beaufort Sea Environmental Assessment Panel Review. It was formally informed of the Beau-

fort Environmental Assessment Panel Review at an October, 1980 BSCAC meeting. At that meeting, staff from the FEARO office made a brief presentation and advised that 'the environmental review process will take a minimum of two years and will allow 'everybody' to get involved'. BSCAC members were concerned 'that they were not aware of this federal process which could have considerable influence on the Beaufort region, that a panel chairman had already been selected, and that the deadline for comment on related issues was less than a month away'.[17] However, it was agreed that a good committee representation should be made at the November 13th FEARO meeting in Calgary, advocating the position that:

i the Panel should have substantial northern representation (including at least one BSCAC member);
ii special efforts should be made to involve Beaufort groups, councils and individuals, by holding meetings in the Beaufort communities and facilitating the preparation of local studies and briefs; if funds were to be provided for studies and presentations, priority should be given to responsible northern organizations;
iii the hearings should be limited to Beaufort environmental aspects only; and
iv the GNWT should handle the socio-economic aspects of the review.

It was also agreed that the BSCAC should become active in the BSEAP review and initiate a Beaufort Studies program, concentrating on environmental, social and economic matters, with as much involvement of committee members and local residents as possible.

In one sense, the BSCAC's participation in the BSEAP review is simply a continuation of its ongoing regular activities. Over the past few years the BSCAC has played a very active role in becoming aware of Beaufort exploration activities through meetings and study tours to other development areas; for example, in February/March of 1981 several BSCAC members participated in a two-week study tour of oil and gas development facilities and related industrial activities in England and Scotland. The purpose of the trip was 'to learn firsthand about North Sea Oil and gas development, the scope of the related projects, the effects the industry has on the people, the economy and the environment and how people have managed to plan for and control development to their benefit'.[18]

---

17. Minutes of BSCAC meeting, 80-4, 1-3 October, 1980, Tuktoyaktuk.

18. Beaufort Bulletin, 3 April 1981.

In order to utilize funding provided by the federal government for participants in the Beaufort environmental review, the BSCAC initiated a community field worker program. The decision to undertake this program was based on the belief that, in spite of the sincere efforts of government and industry to inform Beaufort residents about the environmental assessment review, there was virtually no understanding or appreciation in the communities of what the process involves. Indeed, when the Panel showed up for its meeting in Aklavik to discuss the draft Environmental Impact Statement guidelines, it was a complete surprise to the residents of that community.

The field worker program was put into operation in March of 1982 when a workshop was held in Inuvik for participants from Beaufort and Mackenzie Delta communities. In addition to familiarizing participants with the environmental assessment review process, objectives of the workshop included assisting fieldworkers in organizing a suitable community contact and information program, and providing basic training in information-gathering methods, and preparation of reports to assist community councils. The fieldworker program is now well underway and at present is funded entirely by the BSCAC. The fieldworkers work directly for the respective community councils, and the BSCAC acts as an information source.

**Prognosis for BSCAC**

Because the membership of the BSCAC is expanding and there is an increasing number of activities in the area, both industry and government-related, it was decided that BSCAC activities should be expanded[19] and that new funding be obtained.

At the October 1981 meeting of the BSCAC, members strongly supported the idea of expanding the funding base, "so that they would not be subject to 'industry pawn' criticism".[20] Possibilities have been discussed for financial assistance from federal, territorial and community levels of government. A motion was adopted that the BSCAC executive actively request support for committee programs from all industry and government participants involved in Beaufort exploration and production activities. In the July 1982 committee meeting a number of funding formulae were discussed; at present various possibilities are being explored.

19. For example, suggestions have been made that the BSCAC serve as the basis and model for formal consultation between all companies active in the Beaufort, and communities; eg, the BSCAC could be expanded to accommodate Esso and Gulf and other companies active in the area.
20. Minutes of BSCAC meeting 81-4, 22-23 October 1981, Paulatuk.

As was mentioned previously, the BSCAC represents both the community council and Hunters and Trappers Association of each of the member communities. Because of the high degree of local support enjoyed by the BSCAC, this committee would seem to have great potential to play a major role in the Beaufort Sea Environmental Assessment Panel Review.

## Community Consultation with Government: A Summary

### Federal Government

The federal government owns all Canada Lands and the resources therein, and has jurisdiction over all offshore activities. Consequently, virtually all planning, regulation, monitoring and control of resource development is in federal hands.

As mentioned previously, the approvals process for land-use permits requires that affected communities be consulted. The consultation process with respect to land-use permits was discussed earlier in this chapter.

Other vehicles for voicing community and native concerns related to development are the Arctic Waters Advisory Committee and the Land Use Advisory Committee. The composition of each of these committies and the particular roles they play in the regulatory process were outlined in chapter 3.

Although DIAND officials from Ottawa do make occasional visits, few have been recorded in connection with Beaufort matters in communities other than Inuvik and Tuk. In Holman, for example, council minutes report only a visit from the chairman of the Arctic Waters Advisory Committee in 1976, and one from Canada Manpower in 1977 that were directly related to Dome's activities.

The Beaufort Sea Environmental Assessment Panel Review, which is described later in this paper will also provide a channel for community input into the environmental operating conditions that will be imposed on the proponents in the production phase of Beaufort development. Federal funds made available for the preparation of briefs to the environmental assessment panel will permit interested communities to participate.

### Government of the Northwest Territories

The GNWT has no jurisdiction over oil and gas developments in the Beaufort area. It does, however, act as a spokesman for the communi-

ties on socio-economic issues through its involvement in negotiating certain aspects of socio-economic agreements with the development proponents. These agreements are a condition of the federal approvals process.

It is difficult to document the consultation process that facilitates community input into the socio-economic agreements. Formal appearances before council or requests for council's views on this matter are fairly infrequent. However, regional conferences are held occasionally. For example, in September of 1981, a meeting was held in Inuvik between government officials and delegates from Beaufort and Mackenzie Delta communities, for an exchange of ideas and information. The community delegates received a more in-depth understanding of government programs, departments, policies and activities. As well, government departments received a more detailed insight into community and regional problems, concerns and proposed/anticipated activities over the next few years. This conference was deemed a success, and delegates expressed the desire and need to have more meetings of this nature in the future.

Informal channels of communication are probably much more active. The GNWT has field offices in each community and community visits are made from time to time by personnel from the regional offices. Members of the Legislative Assembly are also a source of information regarding community views.

**Joint Advisory Bodies**

Two joint advisory bodies have been described already - i.e. the Arctic Waters Advisory Committee and the Land Use Advisory Committee. Another joint advisory body is the Northwest Territories Water Board (NWTWB) which is established under the Northern Inland Waters Act. (Use of fresh water for land-based activities is regulated by this Act). The NWTWB consists of no less than three and no more than nine members appointed by the Minister of DIAND. In fact, nine members are appointed in the following manner: six by the federal government, and three on the recommendation of the territorial government.

The Water Board receives applications for water licenses and authorizations, and recommends the terms and conditions that should be attached. In the case of licenses, public hearings must be held. However, oil and gas exploration activities have required only authoriza-

tions.[21] So there has been no formal community consultation on Beaufort activities with this body.

### Consultation with Industry

DIAND has encouraged industry to take the initiative in community consultations, and to set up its own community meetings to discuss proposed programs, employment and training opportunities, economic spinoff opportunities, environmental protection measures and other areas of mutual concern. This method has both advantages and disadvantages. Chief among the advantages cited by DIAND officials is the fact that bilateral meetings are felt to be less likely to produce confrontation situations, which may tend to emerge if government officials are present as mediators.

However, these industry/community meetings are effectively divorced from the formal regulatory or planning process, the structures of which are determined and controlled by government. No matter how frequent or detailed the consultation, any influence that a community may have as a result will depend entirely on the goodwill of the company involved. In many cases, the goodwill has been adequate to ensure that the wishes of communities have been met. The extent and scope of consultation, however, may tend to disguise the fact that these proceedings are outside of the real decision-making process.

### Dome

The three major companies operating in the Beaufort area are Dome Petroleum Ltd, Esso Resources Canada Limited, and Gulf Canada Resources Ltd. Of the three, Dome has been the most active in community consultation. This may in part be an outcome of the fact that its offshore drilling programs were the only ones subject to annual cabinet review, with extensive socio-economic conditions and monitoring. Regardless of the reason, Dome is noted for its extensive consultation about its exploration program, particularly through its use of the Beaufort Sea Community Advisory Committee. Delegations to community council meetings are also used by Dome for consultation purposes. In Tuk, for example, Dome representatives have attended almost every meeting in the

21. Only an 'authorization' is required if water use will not exceed 50,000 gallons per day, or if the proposed use of water will not exceed 270 days.

last two years, as well as meetings of the Joint Planning Committee. In more remote places such as Holman, where interest centres around employment opportunities, visits are less frequent. Information visits concerning program proposals and socio-economic agreements are made by Dome staff. Recruiting trips are made in conjunction with Esso and Gulf. Dome maintains recruiting offices in Inuvik and Tuktoyaktuk, which act as additional sources of information about company activities. It has also hired a consultant to assist local businessmen in getting contracts for services to Dome, and in recognizing and exploiting related spinoff opportunities.

**Esso**

Esso has maintained a much lower profile than Dome in terms of both community consultation and public image. It has operated in the delta area since the mid- 1960s. It has no community-based committee, does not participate in the BSCAC, and only recently began to attend council and planning committee meetings in Tuktoyaktuk and Inuvik on a regular basis. The recent increase in community liaison results in part from the example set by Dome, and in part from an increase in public and government pressure as the production phase draws near.

Esso maintains a recruiting office in Inuvik, and recruits on its base at Tuk as well. Recruiting trips made from time to time to other communities also provide an opportunity for exchanges of information between the company and the residents.

The low level of consultation activity has not harmed Esso's relations with Tuktoyaktuk, where its presence is most felt, or with Inuvik, where the company also has a lot of contacts. Tuk officials characterize relations with Esso as low key, but very positive. They think that Esso is particularly good at advance planning, and therefore keeps council informed without burdening it with numerous requests, changes, and presentations. They also consider that Esso has been especially conscientious with regard to environmental concerns.

**Gulf**

Gulf Canada Resources is becoming active again in the delta region. In the 1970s Gulf had established good community relations, particularly with Coppermine, through its employment program. Outside of Coppermine, Gulf is considered more or less an unknown quantity in terms of its willingness to consult with and accommodate the wishes of community

councils. Representatives of Gulf addressed the Tuk council in September, 1981 presenting its future plans for drilling, for a base camp for ships at McKinley Bay, and for a land base at Tuk to handle administration and personnel transfers. The Tuk base would accommodate approximately 200 people. Gulf officials agreed to council's request for a socio-economic agreement and further information regarding their plans for the land base.

Gulf makes its own visits, and also participates in joint recruiting and information visits to the communities. In addition, program proposals for the production phase have been prepared jointly, and circulated to the communities through their BSCAC representatives.

**The Role of the Committee for Original Peoples' Entitlement in the Consultation Process**

In October 1978, the Committee for Original Peoples' Entitlement (COPE), which represents the Inuvialuit of the western Arctic, signed its Agreement-in-Principle with the federal government. The implications of a final agreement for industrial development in the Beaufort Sea/Mackenzie Delta region could be critical, particularly with respect to rights of access across and upon, and tenure to Inuvialuit lands. It has been claimed that the stringent conditions for these matters, as set out in the Agreement-in-Principle, give the Inuvialuit powers which are unprecedented in southern Canada. Industry feels that prompt rights of access across and upon and tenure to Inuvialuit lands should be guaranteed upon the receipt of a land use permit.

At the present time, the leaders of COPE are upset with the federal government's failure to negotiate a final agreement to implement the terms of the Agreement-in-Principle, and are threatening court action that has the potential to disrupt oil exploration in the Beaufort Sea. According to Sam Raddi, past-president of COPE, oil companies should be excluded from the area until the Eskimos reach a satisfactory agreement with Ottawa on the long-standing issue of land claims.[22] Mr. Raddi feels that by granting exploration permits before claims are settled, Ottawa is trespassing on COPE's land. By the terms of the Agreement-in-Principle, the Inuvialuit were given title to 36,000 square miles in the western Arctic, including oil and mineral rights on 4600 square miles. In addition, compensation totalling $114 million was to be given to natives over a period of 13 years.

Following COPE's protests regarding the controversial Bill C-48, the federal government assured the Inuvialuit of the western Arctic that not

22. Globe and Mail, 5 November 1981.

only would the legislation not interfere with the three-year old tentative agreement but the Inuvialuit would be given the federal government's 25 percent share of oil and natural gas royalties from production on Inuit-owned land. Since little land is involved, however, and most of the proven Arctic resources are offshore, the offer is unlikely to represent much money. The new legislation gives Petro-Canada a retroactive one-quarter interest in all discoveries on federal lands which are not already in commercial production. Exploration companies already own sub-surface rights to about half of the 7500 square kilometres that the Inuvialuit would own outright after a final land claim settlement is reached. Although Ottawa cannot extinguish those company rights, it says that the Inuvialuit can have Petro-Canada's share. According to Mr. Munro and Mr. Laionde,[23] a final settlement, based on the Agreement-in-Principle, will provide for the transfer of those interests.

**Regional Bodies and Interest Groups**

There are a number of organizations and interest groups that consult with the Beaufort communities and in some cases speak for them to the territorial and federal governments on issues related to exploration for the production of oil and gas. These include:

i Inuit Tapirisat of Canada - on environmental matters and the regulatory process;
ii Kitikmeot Inuit Association - on environmental matters, the regulatory process, and land claims;
iii Northwest Territories Association of Municipalities - on desirability of municipal involvement in the regulatory process;
iv Canadian Arctic Resources Committee - on environmental matters and the regulatory process;
v Dene Nation - on environmental matters, the regulatory process and land claims;
vi COPE - the Committee for Original Peoples Entitlement, on matters affecting the inuvialuit of the western Arctic.

Other active interest groups include the Inuvik and District Chamber of Commerce, the Northwest Territories Chamber of Commerce, and the Boreal and Arctic Resources Committee.

23. Globe and Mail, 11th December 1981.

In many respects, the precise concerns of these organizations are similar to those ascribed to communities, the proponents, and the territorial and federal governments. Their views have been expressed through the media (both northern and southern), briefs and publications and through regulatory and planning exercises such as the Beaufort Sea Environmental Assessment Panel Review. Because the review is now ongoing it would be appropriate to focus on it at this point.

## 5. THE BEAUFORT SEA ENVIRONMENTAL ASSESSMENT PANEL REVIEW

The matter of oil and gas production in the Beaufort Sea/Mackenzie Delta region was referred to the federal Environmental Assessment Review Office on the 23rd of July, 1980. The review encompasses future exploration activities, construction of production and transportation facilities and infrastructure, production of hydrocarbons, storage and transportation to markets, in an attempt to study the potential environmental and socio-economic effects of the development.

An information seminar was held in Calgary in November, 1980 for people and organizations likely to participate in the review. Over 100 participants, including representatives from the oil and gas industry, public interest groups, native groups, northern communities, and the federal and territorial governments, met to hear industry representatives describe their preliminary concepts for hydrocarbon production in the Beaufort and to discuss the major issues that could be considered by the environmental assessment panel that would be reviewing the proposal.

At that seminar, the issue of public funding to enable groups to participate in the review was raised.[24] In order to generate effective public participation it is necessary for the public to have adequate access to information about the proposed development and adequate resources to assess the proposed development in order to present an effective case. Few citizens or groups can meet these criteria without some form of assistance. The issue of public funding has also been raised by previous Environmental Assessment Panels. For example, in the Report of the Environmental Assessment Panel on Lancaster Sound Drilling, the Panel recommended that the Federal Environmental Assessment Review Office should develop a mechanism for the provision of public funds to enable intervenors to adequately prepare for public hearings.[25] The ability of the public to participate in the process is regarded as a critical issue because the lack of effective public participation may result in a loss of credibility for the EAR process.

---

24. For example, the BSCAC requested that: (1) special efforts be made to involve local groups, elected councils and individuals in the Beaufort Environmental Assessment Panel Review by holding meetings in the Beaufort communities and facilitating the preparation of local studies and briefs; and (2) if the FEARO office or federal departments fund any group or individuals for studies or presentations, that local Beaufort groups, elected councils and individuals be given priority for utilization of these funds.
25. Federal Environmental Assessment Review Office, Report of the Environmental Assessment Panel on Lancaster Sound Drilling, (Ottawa, February 1979).

In August of 1981 the federal government announced that funding would be available to assist public participation in the Beaufort Sea Environmental Assessment Panel Review. In his announcement the Minister of the Environment said he 'hope(s) funding will enable the public to present their comments effectively on the proposal during the review'.[26] Applications submitted by various native organizations, interest groups and community councils were considered by a funding committee, comprised of officials representing the federal government and the GNWT, and approximately $250,000 was allocated among those organizations which had applied.

In November and December of 1981, meetings were held in various northern communities for the Panel to obtain comments on the draft guidelines. At those meetings a great deal of concern was expressed regarding the actual EAR process itself; e.g., the role of EARP in the overall decision-making framework; the need for regional planning; the timing of the review in relation to land claims; the complexity of the process; and the terms of reference of the Environmental Assessment Panel. Although there were some who expressed complete disillusionment with the entire process, others were of the opinion that although there are some problems with EARP that need to be resolved, the basic process is a good one, that can and will be improved over time. A major drawback of this particular environmental review, however, is the fact that it is the most complex review to be undertaken to date.

The final guidelines[27] were released by the Panel in late February of 1982 and appear to have taken into account many of the concerns which were expressed at the public meetings. For example, one concern which was consistently expressed over and over again and one that is of particular relevance to the Eastern Arctic Study was the fact that not enough local input was being considered. In the guidelines section 2.4.4, 'Effects on the socio-economic environment', an addition was made which reads as follows:

> '...the importance of northerners' input to this section cannot be stressed enough. Identify how and to what extent input from concerned individuals, public groups and communities, has been obtained by the proponents in preparing this section. Plans for continued consultation to obtain future input from these people should also be provided.'

---

26. Environment Canada News Release, August 8, 1981.

27. Beaufort Sea Environmental Assessment Panel, Guidelines for the Preparation of an Environmental Impact Statement, February 1982.

Another notable change in the guidelines is that land claims have been taken into consideration. Section 2.4.4.9 (Others) has been expanded to read as follows:

> 'effects of the proposal on the native land claims process and of the land claims process on the proposal. Also, describe the proponents' policies, if any, with respect to land claims negotiations. Problems and opportunities presented by the land claims issue should be discussed.'

The Panel also responded to many of the broader concerns expressed which were non-guideline specific. For example, one issue that was raised many times during the course of the hearings was that some sort of impact assessment should be done for the various government activities that will be taking place in the region. In reponse to this the Panel issued 'Guidelines for the Preparation of Government Position Statement' to the two territorial governments and a number of federal government departments and agencies in February of 1982. This document is a request for information on their current and future programs and policies related to northern development. It is hoped that these position papers will be completed at approximately the same time as industry's environmental impact statement so that both the industry and government perspectives can be obtained at the same time. The Panel also requested that DIAND provide supplementary information, in addition to the standard request, to other federal departments. Some of the additional information requested was: DIAND's policy for Canada's North; the framework and anticipated timetable for its planning process for the region; a statement on the possible effects of land claims on the proposal and vice versa; and possible mechanisms and regulatory procedures that may be used to ensure that project-related issues are adequately addressed in the future.

These actions by the Panel would seem to indicate that the Panel has made an effort to address the concerns which were raised by various groups in their submissions.

Panel hearings addressing the proponents' Environmental Impact Statement were held in Beaufort communities in early 1983. The final report from the Panel was sent to the Ministers of the Environment, and of Indian Affairs and Northern Development in July 1984.

This review can be regarded as a potentially significant opportunity for communities to have real input into the decision-making process. It is to be hoped that the Environmental Assessment Panel will continue to address the concerns which are raised by the various participants in the process.

## 6. LESSONS FOR THE EASTERN ARCTIC STUDY

From the preceding chapter, it can be seen that there is a variety of major issues concerning exploration for and development of hydrocarbons in the Beaufort Sea area. These are related to:

i environmental impacts;
ii economic impacts;
iii social impacts;
iv political development issues in the context of resource development.

### Environmental Impact Issues

Environmental impact issues must be considered in connection with the following activities and events:

i drilling;
ii construction and use of artificial islands;
iii production;
iv transporation of oil and gas;
v construction of support facilities; and
vi increased population.

Concern over potential environmental impacts during exploration are centred around the possibility of blow-outs during offshore drilling and oil spills during the production-transportation phase. Exploration from artificial islands raises some special environmental concerns as well. It has been suggested, for example, that the movement and adaptability of sea mammals could be affected if a proliferation of islands caused changes in the contours of land-fast ice in the Beaufort. In addition, although the islands are completely cleared and removed to a depth of 3 metres once drilling is complete, it is suggested that navigational hazards remain.

Although production of oil and gas is some years off, a great deal of thought has been given to the potential environmental aspects as evidenced by the Beaufort Sea Environmental Assessment Panel Review. Two compendia of issues have been published as part of that review and it is apparent that the anticipated environmental impacts include the possibility of blowouts during exploration and oilspills during production, storage, and transportation, with consequent damage to the food chain and to the residents who depend on hunting and fishing in and on the sea.

The land-based operations of the petroleum exploration programs have had a considerable impact on the Mackenzie Delta area. Supply points such as Inuvik and Tuktoyaktuk, and the base camps at Tuktoyaktuk and McKinley Bay have grown into sizeable establishments, with resulting strains on water supplies and sewage facilities. The influx of workers is expected to continue; for example, the workforce requirements for Dome alone are estimated to be as high as 6,000 by 1985.[28] The dredging of sand and gravel for construction purposes and for harbour improvement has also affected the environment and prompted expressions of concern by local residents.

**Economic Impact Issues**

For Canada as a whole, the Beaufort Sea oil and gas development offers considerable economic benefit. Both the exploration and production stages involve large capital expenditures, purchases of materials and supplies, and employment opportunities. Particular beneficiaries include the transportation industry, the drilling industry, the shipbuilding industry, and, to some extent, the construction industry.

Once production begins, the resulting increase in domestic hydrocarbons will reduce dependence on imports thereby increasing the security of supply and improving the nation's balance of payments. Government should receive significant revenues, both through taxation and equity participation.

The economic potential of Beaufort Sea development for northern residents relates to three main areas:

i employment;
ii economic spinoffs;
iii revenue from equity, royalties and taxation.

All parties involved in Beaufort development are actively committed to encouraging the employment of northern residents and to training them. Government has attached northern employment and training requirements to the program's approvals and to Dome's annual drilling review. The industry actively recruits and runs on-the-job training programs. Over the five years of seasonal operations (1976-1980), Dome/Can-

28. News/North, June 6, 1981.

Mar provided 7.7 million dollars in direct wages and salaries to N.W.T. residents and Esso added to the total.[29]

It must be acknowledged however, that there are some constraints to employment of residents of the Beaufort area. These include the past difficulty experienced by northern residents in acquiring sufficient education to enable skilled trades training, the special requirements prompted by the existence of a language barrier and the lack of exposure of residents from small communities to the disciplines and skills required in the petroleum industry. Once these constraints are overcome, the potential for increased levels of employment for Northerners is perhaps more severely limited by their small numbers. There is already very little unemployment in most communities in the Beaufort Sea area. It seems likely that, as the workforce expands to the levels anticipated, the absolute numbers of Northerners will increase fairly slowly and their proportion in the total workforce will decline.

Economic spinoff opportunities for Northerners, like employment, are encouraged by government, promoted by industry, and welcomed by many of the residents. Dome has established a fulltime position specifically to identify and encourage participation by local business in support services for its operation. Esso's policy is to give all qualified suppliers the right to tender, and to give preference to Indian, Metis and other local suppliers, provided the standards of quality, service, delivery and price are competitive. In 1980, CanMar purchased 22.6 million dollars in supplies and services from N.W.T. businesses; of this amount 13.5 million was purchased from locally-owned businesses. Esso spent 4.2 million dollars in the North between February, 1980 and February, 1981.

There is a potential for increased revenues to Northerners through equity participation in and royalties from oil and gas production. For example, vehicles for participation by native groups such as COPE, have been studied by industry, government and that organization. The COPE Agreement-in-Principle includes the promise of 25 percent of oil and gas royalties from production on Inuvialuit-owned land. To some extent, this must be viewed as a precedent for future land claims negotiations both with COPE and with other native groups.

**Social Issues**

Throughout the north there have been many significant changes in recent years. Government is much more extensive as evidenced by in-

29. Outcrop Ltd. in association with DPA Consulting Ltd., Dome/CanMar Beaufort Sea Operations, An Economic Analysis, 1976-1980, June 1981.

creased facilities and social and economic programs. The overall increase in the public service infrastructure of the NWT plus the increasing scale of non-renewable resource development has had both positive and negative effects on the people and their communities. Social impacts of Beaufort Sea development have been and will likely continue to be significant, particularly for residents of the area. The nature and extent of social impacts from this development will vary. In the base camp and service communities where involvement and contact between northern and southern cultures is greatest, the changes will likely be profound. They will taper off in more remote communities where involvement may be limited to provision of employees.

Some of the social effects anticipated (and already experienced) are unquestionably negative. These include increases in alcohol, drug abuse, venereal disease, and juvenile delinquency. Other changes from traditional lifestyles are less easily categorized as costs or benefits. Such judgments will depend on personal preferences and expectations. For an individual who seeks total assimilation of Northerners with southern ways, most changes will be welcomed. For those who see integration as their goal, changes which promote familiarization with southern lifestyles but which at the same time protect cherished aspects of the traditional lifestyle are preferred. Short rotation schedules and education in Inuktitut as well as English are examples of changes which promote integration. Other Northerners totally reject southern influences and, for them, virtually all the effects of the Beaufort development will be unwelcome.

It should be noted that some attempts have been made to limit and control the direct social impact of development in the Beaufort communities. For example, the sale of alcohol is banned in all communities except Inuvik, where it is currently being rationed. Both Dome and Esso have acceded to the Tuktoyaktuk Council request to restrict their southern employees' access to the community. Such restrictions should be construed as attempts to control the social impact of Beaufort Sea development rather than to restrict or deny development itself.

**Political Development Issues**

The National Energy Program and the Canada Oil and Gas Act will greatly affect the control of northern residents over resource development. Other prominent factors in the current political evolution of the Western Arctic include the Land Use Regime discussed in Chapter III and the COPE Agreement-in-Principle.

The new political structures and relationships that are emerging as a result of the Beaufort Sea development seem in general to be moving toward greater control by southern interests and a reduction in the role of the territorial governments, northern residents and native groups. COGLA will retain a firm grip for Ottawa on control and revenue of this development, almost all of which will occur on Canada lands. This is contrary to the recent trend to transfer governmental responsibilities to the territorial governments from Ottawa. At the same time, territorial governments will have to bear much of the infrastructure and other costs, without the ability to regulate the rate of development and without direct access to the revenues. For native groups attempting to negotiate land claims agreements, the expansion of Crown and third party interests in the area reduces the total of what can be negotiated. It may also put pressure on both sides to settle in haste, without due consideration of all the consequences, as was done in the case of James Bay.

**Relevance for the Eastern Arctic Study**

The above issues are important in themselves. Indeed, they are the focal point for much attention by the various parties interested in the development of the Beaufort Sea area and the public. The frequency with which they have arisen in the course of the Beaufort Sea Environmental Assessment Panel Review is just one indication of this. However, the relevance of these issues for the Eastern Arctic Study should be cast in a somewhat different light. From the perspective of the Eastern Arctic Study, two major concerns emerge.

i To what extent do these and other relevant issues emerge through the regulatory and consultative process?
ii How are communities involved in that process?

At this point it is appropriate to discern what can be learned from the Beaufort Sea case with respect to these two questions. Among the lessons which do emerge are a number which are particularly relevant to the community level; others relate also to the experience of other levels of government, proponents, native organizations and other interest groups, and the public.

**Distinctions Should be Drawn Among Individual Communities**

The community profiles summarized in Chapter IV reveal varying levels of understanding of the impacts of Beaufort Sea development and differences in local acceptance of it. For example, one can characterize the community of Holman as a feeder community which is relatively unsophisticated concerning the implications of Beaufort Sea development. That community is accepting of the potential benefits of employment derived from development but expresses reservations about environmental impact. The community of Coppermine is situated at the other end of the spectrum. It too is a feeder community but it is more sophisticated in its assessment of the impact of changes in the Beaufort Sea area. It is important as a community which has identified its specific interests and concerns related to the development of the Beaufort. For example, it has limited its participation in the Beaufort Sea Community Advisory Committee to socio-economic matters and excluded itself from deliberation on environmental concerns because of its distance from the area of activity.

Again and in considerable contrast to the above two communities is the base camp community of Tuktoyaktuk. To some extent, it can be described as being forced to adopt a sophisticated approach to assessing the impacts of Beaufort Sea development and to identifying its specific interests. Because of its proximity to the actual exploration area, the interests of Tuktoyaktuk are perhaps more extensive than those of any other community in the Beaufort. Accordingly, it has had to adapt its existing community structures to dealing with these interests. For example, the Tuk Council has had to establish a specific committee to deal with petroleum planning matters and Tuk has had to make special representations with respect to its participation in the Beaufort Sea Community Advisory Committee. The basic attitude of the Tuktoyaktuk council towards Beaufort Sea development can be characterized as one of cautious approval based on the prospect of local participation and some regulatory control.

Finally, the Town of Inuvik, as a technical and transit centre for Beaufort Sea activities can also be described as sophisticated in its identification of local interest in the development, evolution of local structures to handle development pressures, and its desire for participation in the management of the impact of Beaufort Sea development on the Town of Inuvik.

These and other variations among communities affected by Beaufort Sea development require the understanding of the proponents of development and government regulatory and planning agencies.

**All Communities Seek to Participate in Some Aspect of Development Planning**

As indicated above, even the most distant and relatively unsophisticated communities in the Beaufort area have defined specific interests (however limited) in the area's development. While the variations among communities are important, there is a basic need to define the nature of community participation in Beaufort development. This could presumably fall into four categories:

i Direct financial participation through equity participation, distribution of royalties to the local level, and through local management of employment in Beaufort Sea activities;

ii Indirect economic participation - through the development of local businesses to service mainstream exploration and production activities;

iii Participation through the provision of community-based services such as roads, networks, water and sewer services, social programs, etc.

iv Community consultation concerning Beaufort development - in some respects, this latter category is the most contentious of all. As indicated earlier, 'consultation' is an over-used word in Canada's North to the point where it has become almost meaningless. There is a need to distinguish the range of activities which are now undertaken or which might possibly be part of a consultative process. For example, at the lowest level, contacts could be made with communities for the mere passage of information about the prospects for development in the Beaufort Sea. At the other end of the spectrum, would be actual local involvement in decision-making about that development. The entire range of consultative activities which are possible need to be identified and defined. In addition, appropriate avenues to conduct such consultation need to be described and discussed among the various parties involved. The current absence of common understanding about the uses of consultation with respect to Beaufort Sea development and regulation is one of the main sources of dispute and negative impacts in the Beaufort Sea case.

**The Present Approach, Especially in Communities Located Near Exploration Areas, Leaves Local Council Over-burdened**

The experience of the Council of the Hamlet of Tuktoyaktuk in dealing with the proponents of development and the myriad of government agencies which want to discuss various aspects of Beaufort development is significant. In short, that Council has found itself severely over-burdened by new proposals and frequent deputations. The absence of extensive staff resources aggravates this situation and makes long-range planning at the local level difficult. Nevertheless, the Tuk Council seems to acknowledge that such contact is necessary in order to keep informed of current events and future activities. To some extent, the Council o the Town of Inuvik finds itself in the same situation.

It can be argued that despite the burden represented by current discussions and deliberations about the future of the Beaufort area, local councils should remain the focal point for such discussions. They are the basic representative body at the local level. If this approach is accepted, the main challenge which lies ahead is to structure local involvement in a more organized way. To some extent, a start has been made in Tuktoyaktuk and Inuvik. For example, the Council of Tuktoyaktuk has struck a committee to deal with petroleum-planning matters and has received agreement from companies working in the area that they will present their plans to Council in a more comprehensive manner. This approach of periodic, comprehensive briefings is one which should be considered by all parties involved in Beaufort Sea development, including the proponents and governments involved.

Petroleum planning committees, like those established in Tuktoyaktuk and Inuvik may well prove a useful conduit for planning. However, in keeping with the public and democratic nature of local councils in affected communities, the relationship of these committees to the local councils should always be a major concern with the emphasis being on final decision-making at the Council level.

**The Potential for Regional Decision Making Requires Definition**

The development of regional organizations appears to be somewhat less advanced in the Beaufort area than in other parts of the N.W.T.

The Beaufort Sea Community Advisory Committee cannot be considered a public organization because of its sponsorship by Dome.[30] This

30. Earlier reference has been made to suggestions that the BSCAC's funding base be expanded.

is despite the basis of its representation which consists of one (or in the case of Tuktoyaktuk - two) representative(s) of each community council in the Beaufort area plus one representative of each HTA. Its current sponsorship by one company makes it an inappropriate vehicle for consultation by the territorial and federal governments as they make regulatory decisions respecting Beaufort development. The alleged use of the Beaufort Sea Community Advisory Committee as the consultative group for regulatory permit applications by the Department of Indian Affairs and Northern Development area office in Inuvik is therefore somewhat surprising.[31]

Two possibilities seem to emerge. It should be noted that they are not mutually exclusive. First, it would seem that the Beaufort Sea Community Advisory Committee can fulfill a useful role as a public information vehicle between Dome, and perhaps other companies active in the area, and affected communities. There remains a considerable amount of public information dissemination to be done before residents of all Beaufort area communities are fully informed about the potential for Beaufort Sea development and their possible involvement in it. The second possibility would be to establish a more neutral regional committee for council to deal with regarding any common concerns of local councils in the region which might emerge. As was discussed in chapter 4, periodic meetings of Beaufort area communities are already held under the auspices of the Government of the Northwest Territories. In addition, COPE and the GNWT have been discussing the possibility of establishing a Western Arctic Regional Municipality in the area. The potential for some form of public regional organization to deal with at least some aspects of Beaufort Sea development and to relate to other governments and proponents of development merits exploration.

### The Complexity of the Current Regulatory and Planning Process in the Beaufort Has Everyone Confused

A major problem facing both Beaufort Sea developers and communities is the plethora of government departments and agencies involved in planning and regulating activities in the area and the ad hoc nature with which these have emerged. As of April, 1981, there were 24 inter- and

31. According to BSCAC officials, this is not true. They have not been approached by DIAND's Inuvik office regarding regulatory permits.

intra- governmental bodies involved with Beaufort Sea issues.[32] This pre-dates the establishment of the new Land Use Planning Regime, the Beaufort Sea Office, and the Canada Oil and Gas Lands Administration. As there is little understanding of the specific roles and patterns of interaction between these bodies and the statutes which they administer, the result is considerable frustration. At the very least, there is a need to clarify the roles of inter-relationships between:

i the Beaufort Sea Environmental Assessment Panel Review;
ii the Comprehensive Regional Planning Regime announced for the Beaufort Sea in 1981;
iii the Canada Oil and Gas Act and the Canada Oil and Gas Lands Administration.

There are other dimensions of the organization of regulation and planning in the Beaufort which need to be clarified. These include:

i the relationship of the territorial government with its designated responsibilities for socio-economic agreements to federal planning and regulatory regimes;
ii the formal role to be attributed to local governments; and
iii the role of native organizations, especially COPE, in any planning and regulatory structures which emerge.

When faced with the existing organizational complexity, it is not surprising that the desirability of a so-called 'single window' approach to planning and regulation in the Beaufort Sea is raised. Such an approach, involving a single agency to manage all aspects of regulation and/or planning may be difficult if not impossible to design for the Beaufort area given the range and complexity of interests involved. This is especially true in light of the tension inherent in the desire of the territorial government, COPE, and some local councils for decentralization and the current centralizing tendency of the federal government with respect to hydrocarbon development in the Beaufort.

---

32. Report of the Task Force on Beaufort Sea Developments, Submitted to the Senior Policy Committee, Northern Development Projects, by Olav H. Loken, April 1981.

**The Impact of Land Claims Is Possibly Significant But Remains Unknown**

The future of land claims negotiations and eventual settlement remains an important factor when considering the development of the Beaufort Sea area. In this regard the COPE claim is the major focus of concern, although the claims by the Council for Yukon Indians and ITC also have an impact, as well as the questions of division and revenue sharing. The major impacts of the claims themselves and their eventual settlement may occur in two main areas. First of all, as evidenced by the Agreement-in-Principle signed between COPE and the Government of Canada, questions related to land disposition and rights plus revenues and royalties from development are central to the claim itself. Secondly, although the federal government has steadfastly refused to consider political development in the context of claims negotiations, political structures which may emerge as a result of the or at the same time as a claims settlement will be important. In the case of the COPE claim, suggestions concerning the establishment of the Western Arctic Regional Municipality and local and regional development corporations appear to be important.

At this point in 1982, uncertainty concerning the disposition of the existing Agreement-in-Principle between COPE and the federal government and the future course of land claims negotiations in the Western Arctic and prospects for divison have contributed to the general lack of clarity concerning the rules of the game with respect to Beaufort Sea development. This is especially the case for Northern residents and for the proponents of Beaufort Sea development.

APPENDIX I

## ACRONYMS USED IN THE BEAUFORT CHRONOLOGY
(in order of appearance)

| | |
|---|---|
| AWOGAC | Arctic Waters Oil and Gas Advisory Committee |
| DOE | Department of the Environment |
| COPE | Committee for Original Peoples' Entitlement |
| DINA | Department of Indian and Northern Affairs |
| APOA | Arctic Petroleum Operators Association |
| DIAND | Department of Indian Affairs and Northern Development |
| CanMar | Canadian Marine Drilling Limited |
| GNWT | Government of the Northwest Territories |
| ITC | Inuit Tapirisat of Canada |
| EMR | Energy, Mines and Resources |
| HTA | Hunters' and Trappers' Association |
| GCRI | Gulf Canada Resources Inc. |
| BSCAC | Beaufort Sea Community Advisory Committee |
| FEARO | Federal Environmental Assessment Review Office |
| EARP | Environmental Assessment and Review Process |
| BSEAP | Beaufort Sea Environmental Assessment Panel |
| NEP | National Energy Program |
| EIS | Environmental Impact Statement |

APPENDIX II

## BEAUFORT SEA CASE STUDY
## CHRONOLOGY

| | |
|---|---|
| 1958 | First large filing for exploration permits. |
| Early 1960s | Esso Resources Canada Ltd. becomes the first operator in the Beaufort Sea area. |
| 1965 | Gulf Canada Resources Inc. also becomes active and drills the first well in the Mackenzie Delta. |
| 1970 | Esso strikes oil at Atkinson Point, thereby shifting attention to the offshore. |
| 1972 | Dome applies for its first offshore drilling permit. |
| June 1972 | Cabinet asked to consider question of oil and gas exploratory drilling in offshore Northern Canada.<br><br>Arctic Waters Oil and Gas Advisory Committee (AWOGAC) established as inter-departmental review committee to recommend terms and conditions for drilling authority. |
| November 1972 - May 1973 | Gulf Oil and its contractors employ Inuit from Coppermine in the Mackenzie River Delta. The Settlement Council of Coppermine perceives the Gulf work program positively. |
| 1973 | Esso begins first drilling from an artificial island. |
| July 1973 | Cabinet decides: a) to go with very detailed requirements for companies to receive Approval-in-Principle and Application for Drilling Authority, b) to hasten environmental studies of drilling impact.<br><br>Studies are to be conducted by AWOGAC, which will also regulate the environmental aspects of offshore drilling projects. |

20 September 1973 Approval-in-Principle granted for drilling to begin in 1975. Approval conditions require operators to finance the research programme which is to be directed by DOE. Companies object to this requirement.

October 1973 After a great deal of negotiation, it is finally agreed that the cost of the studies will be equally shared by government and industry. The research studies are estimated to cost between $4 and $5 million.

January 1974 'Offshore Drilling in the Beaufort Sea', Report prepared for COPE by Douglas H. Pimlott. A report on drilling from barges in the Beaufort Sea, alleges unnecessary secrecy by DINA and DOE regarding plans and research in this area.

8 February 1974 COPE releases its report on offshore drilling in the Beaufort Sea. After report was made public, much more information began to be available from government and industry on offshore drilling, e.g., DINA's Regional Information Service issued an offshore edition of Dialogue North (date unknown).

15 February 1974 Treasury Board rejects completely DOE's request for new funds ($2.2M) to finance its half of the research program.

18 February 1974 APOA announces that a $2M environmental impact study of the Beaufort Sea will be carried out as a 'joint undertaking of APOA and the federal government'.

1 March 1974 Dome receives Approval-in-Principle for its offshore drilling system.

6 March 1974 DINA announces that industry will pay for all of the environmental studies at an estimated cost of $4.1M and that drilling would not begin until 1976.

March 1974 Chretien announces that Dome and Hunt have been authorized to commence construction of drilling systems that would be employed in the Beaufort Sea. This would allow the companies to move the specifi-

| | |
|---|---|
| | cally designed systems to the Beaufort Sea region late in 1975, to be ready to commence drilling operations at the beginning of the open water season of 1976. |
| 1974 | The 'year summer almost does not come to the Beaufort Sea' - heavy ice conditions force cancellation of some studies and allow only limited progress on a number of others. |
| 1974 | Publication of the 'Beaufort Seer' by APOA to provide information on the Beaufort Sea environmental program. |
| Throughout 1974 & into 1975 | Twenty-nine studies of environmental impact of drilling sponsored by the federal government (2/3 of cost) and industry (1/3 of cost). |
| January 1975 | An Investigators' Conference is held in Calgary to review progress made during the summer on the various research projects. Several of the interim reports point to the need for further studies. (Criticism of the one-year program is levelled - i.e. environmental conditions vary so much from year to year that a three-year program would be the minimum required to produce a reasonable understanding of what could be done to handle and minimize the effect of oil spills.) |
| 25 March 1975 | COPE sends a telex to the ministers of DINA and DOE regarding DOE's proposed experiment involving the discharge of crude oil under the ice - such experiments should be subject to consultations and approval with native people before proceeding. |
| 17 April 1975 | COPE sends another telex to the two ministers (DINA and DOE) stating objections to experiments (involving the discharge of crude oil under the ice) having taken place with no opportunity for review by COPE. |
| 17 November 1975 | Dome makes formal submission to Minister of Indian and Northern Affairs to issue Drilling Authority for two Beaufort Sea wells. This submission reviewed by AWOGAC in three series of formal meetings held in northern communities. Meetings are sponsored by in- |

| | |
|---|---|
| | dustry and attended by DIAND and environmental officials. |
| 1975 | CanMar experiences problems in preparing for the following summer's drilling. The short summer season prevents CanMar from even commencing operations at the prime drilling location in 150 feet of water. |
| Week of 1 January 1976 | Report, Preliminary Environmental Assessment, publishes results of environmental studies. |
| 16 January 1976 | Letter from J.D. Cameron, Coordinator, Manpower Planning and Development, Dome Petroleum, to Jack Witty, indicates that Dome employees would be visiting communities during January 1976 to discuss employment of people from communities. Mentions orientation course for Dome supervisory people and natives, and coordination of recruitment in communities with GNWT Department of Economic Development and Tourism priorities. |
| Week of 1 February 1976 | Public meeting in each Beaufort community to discuss proposed drilling. |
| 27 Feburary 1976 | Joint claim of COPE and ITC (Nunavut) presented to federal government. |
| May 1976 | Request from Minister of Northern Affairs that the GNWT supply information on northern employment and training activities associated with Dome's offshore drilling project. |
| September 1976 | 'Nunavut' withdrawn. |
| 6 December 1976 | DIAND Minister Allmand announces comprehensive study of socio-economic, technical and environmental impact of Dome's offshore drilling would be undertaken. (Group of studies overseen by committee of DIAND, EMR, Environment, External Affairs and GNWT officials). |

| | |
|---|---|
| 14 December 1976 | COPE announces it will proceed with the development of its own claim (separate from revised ITC proposals) because of the more immediate pressure of resource development in the Western Arctic. ITC and the federal government agree to do this; federal funding provided in the form of accountable contribution. |
| 1976 | Dome receives its first offshore drilling permit. |
| 1976 | Letter from Ben Hunter, Head, Special Employment Program, Department of Economic Development and Tourism, to J.D. Cameron of Dome expressing a desire for the GNWT to cooperate and assist Dome in its community employment activities. |
| 1976 | Beaufort Sea Community Advisory Committee organized in 1976 to provide information and contact between industry and local residents. First meeting held on June 3, 1976. |
| 1976 | GNWT employment officials participate in Dome/CanMar's technical and orientation program. |
| February 1977 | Mary Collins Consultants Ltd. releases 'The Social and Economic Impacts of CanMar's 1975 Operations on the Beaufort Sea Communities'. |
| 13 May 1977 | COPE submits its claim proposal to the federal government ('Inuvialuit Nunangat' - 'Land of the Inuit of the Western Arctic'). This claim is based on the same principles as the 'Nunavut' proposal:<br>- ownership in fee simple of approximately 70,000 square miles of water in NWT's Western Arctic region;<br>- regional municipal government;<br>- establishment of public land management agency;<br>- royalties from oil and gas development. |
| May 1977 | Cabinet approves exploratory drilling in Beaufort Sea for three-year period, 1977-79, and directs that annual reports be submitted to Cabinet by Minister on results of each year's drilling. |

| | |
|---|---|
| | Beaufort Sea Steering Committee established, chaired by senior officials of DIAND, with representatives from EMR, Transport Canada, Industry, Trade and Commerce, Environment Canada, External Affairs and GNWT to carry out review of Beaufort operation. |
| 28 July 1977 | Socio-economic agreement between DIAND and Dome signed, respecting northern employment and training, use of local services, social and cultural considerations. |
| 7 December 1977 | Joint position paper on Arctic wildlife component of COPE claim is made public. |
| 1977 | Berger Report is released. |
| 1977 | Post-season environmental assessments and review of Dome's compliance with environmental operating conditions carried out every year since 1976 inclusive. |
| 10 January 1978 | DIAND's Social/Economic/Cultural Review Sub-committee releases 'An Assessment of the Social, Cultural, and Economic Impact of Dome/CanMar's Drilling Activities, 1977'. It concludes that Dome/CanMar should be permitted to drill for oil and gas subject to the findings of the technical and environmental review studies. |
| 14 July 1978 | Joint position paper by COPE and federal government on all facets of COPE claim made public. |
| August 1978 | Gulf Oil representatives announce the end of Coppermine employment. The Coppermine Council thanks Gulf for the opportunity. |
| 31 October 1978 | COPE Agreement-in-Principle signed. It provides the framework for final agreement, and includes such items as land; hunting and fishing rights; $45M (present value); social and cultural security. Final agreement is anticipated in one year's time. |

| | |
|---|---|
| 1978 | It is agreed that socio-economic commitments regarding northern elements of Dome's drilling will be handled by a Memorandum of Agreement between the company and the federal government instead of the formal agreement adopted in 1977. |
| February 1979 | Coppermine Council decides that HTA should deal with all land use applications not actually within community boundaries. |
| 19-23 February | Public meetings are held in seven Beaufort communities re: past and future Dome activities. |
| 6 May 1979 | APOA Workshop, Fairmont, B.C. - includes Socio-Economic Impact Assessment Recommendations:<br>1. community communications top priority;<br>2. flexibility in socio-economic process essential;<br>3. action plans by proponents;<br>4. Source Data Book should be prepared by government to avoid repetition. |
| 18 May 1979 | Agreement reached on selection of most of the land over which Inuvialuit would have surface rights. |
| Summer 1979 | COPE negotiations are interrupted pending results of government review of federal claims policy. |
| 1979 | Dome receives government approval to build a new winter harbour at McKinley Bay, 50 miles east of Tuktoyaktuk. |
| 1979 | Joint government/industry Steering Committee on Problems of Arctic Hydrocarbon Development (SCOP) meetings regularly during the year, to discuss and identify potential problems during the production phase of oil and gas fields. A Sub-committee is included on Development Impact under Stan Mackay (Esso Resources and APOA). |

| | |
|---|---|
| January 1980 | 'Socio-economic Review of the Beaufort Sea Drilling Program, 1976-1979,' by Terry Foster, Executive Committee Secretariat, GNWT, is released. It concludes that there is no need for detailed socio-economic reviews unless there is a significant change in Dome/CanMar's drilling program. The company should be encouraged to continue its operations in the Beaufort Sea. |
| May 1980 | 'Summary and Recommendations of Socio-Economic Principles and Practices' (of Gulf Canada Resources Ltd.) by Cornerstone Planning Group Inc. is released. It is a summary of three studies of GCRI socio-economic policies and practices. Report notes that despite good public and government perception of GCRI, improvement is warranted in internal communications regarding northern issues and in northern employment practices. |
| 10 June 1980 | Memorandum of Understanding Between the Government of Canada (DIAND) and Dome Petroleum Ltd. and Canadian Marine Drilling Ltd. 1980 Program Respecting Socio-Economic Matters, Beaufort Sea Drilling Program. It describes Dome/CanMar's Action Plan which consists of programs in the areas of northern employment and training, use of local services and businesses, social and cultural considerations, information and communications, and future development. |
| 1980 | Tuktoyaktuk Council withdraws from BSCAC over the issue of representation. They want more than two representatives because of the direct impact of development on Tuk. They subsequently rejoined and were given an extra representative on the BSCAC. |
| 23 July 1980 | Minister of DIAND refers the oil and gas production in the Beaufort Sea to the Federal Environmental Assessment Review Office (FEARO). This review process is to assess socio-economic effects as well as environmental considerations. Dome, Esso and Gulf propose to make a joint statement to the environmental assessment panel. |

| | |
|---|---|
| November 1980 | Information seminar is held in Calgary for people and organizations likely to participate in the BSEAP Review. |
| 1980 | Beaufort Sea Steering Committee submits its review of Beaufort operations to the Cabinet. |
| 1980 | Gulf announces its intention to resume a more active role in Beaufort exploration. |
| 1980 | Dome review of 1980 Beaufort Sea Program. Production testing was completed at one well while artificial islands were started at two future drill locations. Five wells, each with a significant hydrocarbon potential, will be tested early in the 1981 season. |
| January 1981 | 1st meeting of the Inuvik Petroleum Planning Committee. |
| Early 1981 | Major Development Planning Committee set up to focus on impact of oil development on Tuktoyaktuk and to plan for it. |
| 26 January 1981 | Letter from BSCAC Chairperson to Minister of Indian Affairs and Northern Development requesting $100,000 for Beaufort Sea research and information program. |
| 27 January 1981 | Dome Petroleum Ltd. forms a major new Canadian Oil and Gas Company, Dome Canada Ltd., with a Canadian ownership rate in excees of 75 percent, which will qualify the new company for the maximum level of grants provided in the National Energy Program. |
| February 1981 | Dome Canada Ltd. announces that they wish to establish a mill to process barite at Inuvik. Barite is required in its Beaufort Sea drilling operations. |
| 12 March 1981 | Dome Petroleum arranges for a block of shares in the new Dome Canada stock issue, for sale to the residents in the Beaufort communities. The initial allotment of 50,000 shares at $10/share was available on March 12 and was sold out in two days. Additional |

allotments were then made to satisfy all orders received. A total of 77,789 shares were sold by the March 19 closing date to 441 northern individuals living in nine communities.

March 1981 — Beaufort Sea Community Advisory Committee goes to Shetlands and England to learn about North Sea oil activities.

14 April 1981 — Tuk Major Development Planning Committee recommends that the federal government draw up one standard socio-economic agreement similar to that with Dome and use it with all major development companies operating in the Beaufort. The Committee also recommends that companies not be self-monitoring, but that the federal government set up a harbour authority, controlled by the Hamlet Council, to monitor activities in Tuk Harbour. (N.B. Part cipants on the Committee included the Hamlet Council, Dome, Esso, Arctic Transportation Ltd. and Gulf.)

30 April, 1981 — DIAND announcement of 6th consecutive year of oil and gas exploration - special reference was made to Dome/CanMar.

April 1981 — 'Report of the Task Force on Beaufort Sea Developments', by Olav Loken, submitted to the Senior Policy Committee, Northern Development Projects. It contains a summary of the current status of Beaufort Sea developments as seen from a government and industry perspective. It underlines the lack of a current, comprehensive and clearly-communicated northern development policy and the need for clarification of its linkages with the N.E.P.

January - May 1981 — Beaufort Sea Environmental Assessment Panel is appointed.

29 May 1981 — Dome announces $29M construction contract for an ice-breaker supply vessel awarded to a Vancouver firm, Burrard Yarrows Corp. The vessel will be ready for the 1982 drilling season and is to be used around drillsites, for supply and research regarding oil and gas transportation to the south.

| | |
|---|---|
| May 1981 | 'Native Affairs Program: Employment Participation Guidelines' by Gulf Canada Resources Inc. which announces GCRI plans to concentrate on Beaufort during 1981-82. |
| 3 June 1981 | Minutes of Tuktoyaktuk Council meeting requesting that a letter be sent to the BSCAC stating that the Tuk Council is not in favour of the BSCAC making presentations to a BSEAP hearing on behalf of Tuk. |
| June 1981 | GCRI announces plans to proceed with development of a $674 million drilling system for use in the Beaufort Sea. |
| | Forecast that Dome will need 6000 workers by 1985. In-house training for northerners is now provided at Tuktoyaktuk. Dome suggests that the GNWT establish a program of promotion on higher education and create a department of advanced education and manpower. |
| 12 June 1981 | Issue of draft guidelines for the Environmental Impact Statement (EIS) and public meetings in some Beaufort communities to review the guidelines. Beaufort Sea Panel office opened in Inuvik. |
| June 1981 | 'Hydrocarbon Development in the Beaufort-Mackenzie Delta Region' released by Dome, Esso and Gulf. Report describes oil development scenarios in the region until the year 2000. |
| 31 July 1981 | The federal government announces approval of a new policy on comprehensive northern land use planning. The program will focus immediate attention on priority areas such as the Mackenzie Valley, including Norman Wells. |
| July 1981 | Casual visits to the Beaufort communities by BSEAP Committee to review the procedures and the guidelines. |

| | |
|---|---|
| Summer 1981 | Dome proposes a community partnership arrangement where each community can invest in a share of the shore base support facilities at Tuktoyaktuk and McKinley Bay. The investment would be made by a community council or a community corporation, and each community council would decide on how the benefits would be spent for community improvements. Response from the communities is expected soon. |
| 8 August 1981 | Environment Canada Minister John Roberts announces that funds will be available to assist public participants in the environmental assessment review of proposed hydrocarbon development in the area. A committee will consider proposals and recommend allocation of money in accordance with specific eligibility criteria. |
| 12 August 1981 | BSCAC meets with John Munro in Tuktoyaktuk. It presents a list of needs including: improvement of local education services; need for community cash flow for a positive response to exploration impacts; support for community development corporations; expansion of employment participation opportunities; and local involvement in the government regulation process. |
| 19 August 1981 | Tuk Council withdraws membership from BSCAC. |
| 21 August 1981 | John Munro meets in closed working sessions with Dome, Esso and Gulf, the BSCAC, the Territorial Government, COPE and the Tuktoyaktuk Hamlet Council to discuss the federal government's proposed land use planning commission for the Beaufort area. The commission will be led by the federal government and will have input from the territorial government, Beaufort communities and industry, plus local native organizations. The policy will outline new technical training programs to prepare local people for work in the oil and gas industry and the need for developing services like roads and utilities. |

| | |
|---|---|
| August 1981 | Tuktoyaktuk Hamlet Council sends a letter to Dome Petroleum Ltd. saying it is severing all ties with the oil company over a dispute it has with the Beaufort Sea Community Advisory Committee. The Council says that Dome refuses to accept its authority in relationship to the Advisory Committee. (N.B.: HTA is still a member of BSCAC - only the Council withdrew.) |
| 9 September 1981 | Tuk Council and Dome make amends. Tuk council still not back on BSCAC. |
| 11 September 1981 | Deadline for applications for funding for public participation. |
| 1981 | Dome completes major base camp at Tuk. |
| 5 October 1981 | Information memo sent to all BSCAC members and Beaufort community leaders reporting that the BSCAC has received $20,000 in federal funding to assist member communities in making presentations to the BSEAP hearings and that most of the $250,000 government funds available are taken up by southern-based wildlife conservation groups. |
| 3 November 1981 | Dome announces the results of the summer drilling season at the Koakoak 0-22 and Kopanoar 21-44 wells in the Beaufort Sea. Estimated potential oil reserves are between two and five billion barrels for Koakoak and 1.8 to 4.5 billion barrels for Kopanoar with a recovery rate expected to be in the range of 15 to 40 percent. |
| November/December 1981 | Public meetings held in various communities to obtain input on the draft guidelines. |
| 9 December 1981 | Parliament passes Bill C-48. |
| 18 February 1982 | Tuk Council decides to join BSCAC. |

| | |
|---|---|
| February 1982 | Final guidelines for EIS released. Panel asks for position statement from the two territorial governments and various federal departments and agencies regarding their programs, policies and activities. A request is also made to DIAND to provide information in addition to what is being asked for of other departments in their government position statements. |
| 10 May 1982 | Announcement by the Ministers of Energy, Mines and Resources, and Indian Affairs and Northern Development that an agreement has been reached under which Esso Resources Canada Ltd. and 10 Canadian companies will participate in a $600 million exploration program over the next 5 years in the Beaufort Sea/ Mackenzie Delta region. |
| early 1983 | Panel hearings re: EIS to be held in Beaufort communities. |
| June 1983 | Final report from Panel to go to the Ministers of DIAND and the Environment. |
| July 1983 | Recommendations to the federal cabinet. |

APPENDIX III

## LIST OF BEAUFORT SEA INTERVIEW RESPONDENTS

ALLMAN, Dave; Assistant to Secretary Manager, Inuvik

BLAIS, Louis; Director of Public Affairs, Gulf Canada Resources Inc., Ottawa

CARLYLE, Harry; Senior Vice-President, Gulf Canada Resources Inc.

DUCZEK, Dick; Manager of Industrial Relations and Northern Relations, Dome/CanMar, Calgary

FROOD, Peter; Co-Op Manager, Holman Island

GILDAY, David; Government of the Northwest Territories

HEATH, Bonnie; Land Use Administrator, DIAND

HEDBERG, Len; District Manager, Inuvik Region, DIAND

HILL, Dick; Coordinator, BSCAC

HUSKEY, Susan; Beaufort Sea Community Advisory Committee

IRISH, Doug; Northern Employment Councillor, Esso Resources

KARNES, Rose Marie; Dome Petroleum Ltd., Supervisor, Northern Relations

LAFRENIERE, Marc; COPE Claim, Office of Native Claims, DIAND

LAVIGNE-BRUCHET, Elise; Gulf Canada Resources Inc., Calgary

LOKEN, Olav; Director, Northern and Environmental Protection Branch, DIAND, Ottawa

MARSHALL, Dave; Director, Pacific Region, FEARO, Vancouver

MILANI, David; Water Officer, DIAND, Inuvik

NOKADLAK, Terrie; Holman Settlement Manager

NOSEWORTHY, Dwight; Government of the Northwest Territories

PEDERSON, Red; Deputy Mayor, Coppermine, President, Coppermine Development Corp.

STERLING, Robert; Chief Employment & Socio-Economic Planning Director, DIAND, Ottawa

STRELIOFF, Dan; Secretary Manager, Inuvik

TAPTUNA, Fred, Mayor of Coppermine, Vice-President, Inuit Development Corp.

TESTART, Terry; Secretary Manager, Tuktoyaktuk

WARNE, Reid; Beaufort Area Foreman, Esso Resources, Tuktoyaktuk

APPENDIX IV

## BIBLIOGRAPHY FOR THE BEAUFORT CASE STUDY


Arctech Services, Beaufort Opportunities. (Inuvik, April 1981), approximately 60 p.

Arctic Institute of North America, University of Calgary, A Decade Ahead: Frontier Oil and Gas Development. Proceedings of the Tenth Environmental Workshop, held at Le Chateau Montebello, Quebec, 28 April - 1 May, 1981, 233 p.

Beaufort Sea Environmental Assessment Panel, The Beaufort Sea Hydrocarbon Production Proposal. Draft Guidelines for the Preparation of an Environmental Impact Statement, June 1981, 36 p.

Beaufort Sea Environmental Assessment Panel, Compendium of Written Submissions to the Panel on the Draft Environmental Impact Statement Guidelines. October 27, 1981.

Canada, Department of Indian Affairs and Northern Development. Socio-Economic Review of the Beaufort Sea Drilling Program 1976-79. Prepared by Terry Foster, Executive Committee Secretariat, Government of the Northwest Territories, (Ottawa, 1980), 38 p.

Canada, Department of Indian Affairs and Northern Development. The Lancaster Sound Region 1980-2000 Draft Green Paper. Lancaster Sound Regional Study, (Ottawa, 1980), 113 p.

Canada, Department of Indian Affairs and Northern Development. Under the Beaufort - Canada Drills in the Arctic, (Ottawa, 1980), 42 p.

Canada, Department of Indian Affairs and Northern Development. Northern Affairs Program, Review of the 1980 Beaufort Sea Drilling Program. (Ottawa, 1981), 26 p.

Canada, Federal Environmental Assessment Review Office, Beaufort Sea Environmental Assessment Panel. Interim Compendium of Major Issues. November, 1980, 24 p.

Canadian Arctic Resources Committee, Lancaster Sound - Issues and Responsibilities, Environmental Science Workshop for the Lancaster Sound Region. Kananaskis, Alberta, 6-8 November 1979. Edited by E.F. Roots, 110 p.

Canadian Arctic Resources Committee, Oil Under the Ice, by Douglas Pimlott et al. (Ottawa, 1976), 178 p.

Dome Petroleum Ltd., Industrial Benefits to Canada of Beaufort Sea Development, March 1981, 165 p.

Dome Petroleum Ltd. and Canadian Marine Drilling Ltd. Five Years of Progress: Dome Petroleum's Exploratory Operation in the Beaufort Sea, Past, Present and Future. (Calgary, February 1980), 49 p.

Dome Petroleum Ltd., Esso Resources Canada Ltd., and Gulf Canada Resources Inc., Beaufort Sea/Mackenzie Delta Development Plan, November 1980, 116 p.

Dome Petroleum Ltd., Esso Resources Canada Ltd., and Gulf Canada Resources Inc., Hydrocarbon Development in the Beaufort Sea/Mackenzie Delta Region. June 1981, 28 p.

Gulf Canada Resources Inc., Development of Socio-Economic Principles and Practices. Study Three - The Resource Sector's Socio-Economic Practices and Trends. Prepared by Cornerstone Planning Group Ltd., May 1980. 95 p.

Gulf Canada Resources Inc., Development of Socio-Economic Principles and Practices. Study Three - The Resource Sector's Socio-Economic Practices and Trends. Prepared by Cornerstone Planning Group Ltd., May 1980. 95 p.

Harrison, Gordon R., Beaufort Sea Oil & Gas and the Northern People, Northern Development Conference. (Edmonton, Alberta: Nov. 14-16, 1979), 35 p.

Hobart, Charles W. Employee Adjustment and Effectiveness: Arctic Oil Explorations of Gulf Oil Canada 1973-74. Volume I: Sociological Analysis. (Westrede Institute, Edmonton, Alberta), November, 1974, 222 p.

Hobart, Charles W. and Kupfer, George. Inuit Employment by Gulf Oil Canada. Assessment and Impact on Coppermine 1972-73. (Westrede Institute, Edmonton, Alberta), n.d., 134 p.

Loken, Olav H. Report of the Task Force on Beaufort Sea Developments. Submitted to the Senior Policy Committee, Northern Development Projects, by Olav H. Loken, April 1981, 137 p.

Mary Collins Consultants Ltd., The Social and Economic Impacts of Canadian Marine Drilling Ltd.'s 1976 Operations on the Beaufort Sea Communities. A report prepared for Canadian Marine Drilling ltd., (Toronto, February 1977), 94 p.

Memorandum of Understanding Between the Government of Canada, Department of Indian Affairs and Northern Development and Dome Petroleum Ltd. and Canadian Marine Drilling Ltd. 1980 Program Respecting Socio-Economic Matters, Beaufort Sea Drilling Program. (June 10, 1980), 20 p.

Minutes of Coppermine Council Meetings.

Minutes of Holman Council Meetings.

Minutes of Inuvik Council Meetings.

Minutes of Inuvik Petroleum Planning Committee Meetings.

Minutes of Tuktoyaktuk Council Meetings.

Minutes of Tuktoyaktuk Petroleum Planning Committee Meetings.

Outcrop Ltd. in association with DPA Consulting Ltd. Dome/CanMar Beaufort Sea Operations, An Economic Analysis, 1976-1980. June 1981, 99 p.

## THE AUTHORS

M.P. Sharon Brown graduated from Queen's University with an Honours B.Sc. in mathematics. She then obtained a B.Ed., and taught mathematics and business courses for several years. In 1980 Ms. Brown returned to Queen's to work as a research assistant for the Institute of Local Government, on the Eastern Arctic Study and on an evaluation of the funding of public participation in the Beaufort Sea Environmental Assessment Review Panel. In 1983 she joined the National Energy Board, looking at socio-economic aspects of the Norman Wells Pipeline.

Katherine A. Graham is Director of the Institute of Local Government, Queen's University. She holds degrees in Politics from Glendon College of York University and Queen's University and has taught at both universities. A significant part of her research and consulting experience relates to the North. This includes work on the impact of small craft harbour facilities in the Northwest Territories, a review of the administration of mineral exploration in the Yukon and Northwest Territories, preparation of background studies on local and regional government in the Northwest Territories for C.M. Drury and evaluation of the funding of public participation in the Beaufort Sea Environmental Assessment Review. Katherine Graham is Principal Investigator for the Eastern Arctic Study.

Margot Wojciechowski has a B.A. in Political Science and Economics from the University of Toronto (1958) and an M.A. in Political Studies from Queen's University (1970). Her professional experience includes three years as an economist with the Dominion Bureau of Statistics, and several research positions in the field of public administration. She is now assistant director of the Centre for Resource Studies at Kingston.

## THE CENTRE FOR RESOURCE STUDIES

The Centre for Resource Studies (CRS) was established in 1973, under the sponsorship of Queen's University, the federal Department of Energy, Mines and Resources, and The Mining Association of Canada, to carry out a program of research and publication on mineral policy issues.

The Centre provides opportunities for multidisciplinary research in resource studies at Canadian universities, furnishes reliable information on matters related to mineral resource policy, and promotes closer liaison between government, industry and other concerned groups. The research program is carried out both at the Centre and by means of contracts with qualified investigators, usually at Canadian universities, while small exploratory studies are funded through a system of grants-in-aid of research.

CRS Seminars involve representatives from governments, industry, universities, labour, and other interested groups in working sessions on issues of current concern. About four seminars are held each year. Through this program of research and seminars, and the resulting publications, the Centre contributes to informed discussions and a better understanding of significant issues.

The Centre is governed by a board of directors which decides general policy and establishes priorities for research. The board has sixteen members, appointed by Queen's University, The Mining Association of Canada, and the federal government. Guidance on the research program, together with discussion of policy issues and other matters, is provided by the Advisory Council. This body comprises all researchers associated with the Centre, together with members appointed from such groups as governments, industry, labour, and consumers. Committees of specialists aid in the development of projects and the selection of research proposals, and advise on the progress of the research. The executive director and staff are responsible for the work of the Centre within this framework.

The Centre welcomes comments on its publications, proposals for research projects or for publication, or enquiries about any aspect of its work.

Executive Director
Centre for Resource Studies
Queen's University
Kingston, Ontario, Canada K7L 3N6
(613) 547-5957

## EASTERN ARCTIC STUDY

The Centre for Resource Studies and the Institute of Local Government, both of Queen's University in Kingston, Ontario, are undertaking a study of the ways in which the land claim of the Inuit Tapirisat of Canada (ITC) may affect local government and mineral development in the Northwest Territories (NWT). Financial support for the study is being provided by an independent agency, the Donner Canadian Foundation. Advisory support is being provided by the ITC, the the federal government, the Government of the Northwest Territories, and many other agencies, companies and interested groups.

The objectives of the Eastern Arctic Study include the following:

1. to study the potential impact of the settlement of ITC land claims, and of constitutional development in the NWT, on local government in the ITC area;

2. to study the potential impact of these changes on mineral development (including both petroleum and mining) in the ITC claim area.

3. to present the results of this research in a manner which will permit its use by northerners and other interested parties to anticipate possible difficulties and mitigate their effects.

Local government is extremely important to the residents of the Northwest Territories, because local councils and committees provide services that are basic to everyday needs. In addition, a community's local government can often act as the interpreter and advocate of peoples' interests and needs.

We expect the land claim negotiations to result in two related outcomes.

i Local governments will be given increased responsibilities in the land claim area. Some changes are already in progress, chiefly through the initiative of the communities themselves and of the Government of the Northwest Territories. ITC also supports strong local government. The phrase 'local government' refers to any governing authority established below the territorial level. It could include, for example, regional governments as well as hamlet or settlement councils and their committees.

ii There will be a significant increase in the degree of influence exerted by local governments, and by native institutions such as development corporations and cooperatives, on resource planning and the mineral development process.

Thus we expect the settlement of claims to affect significantly the climate for mineral development in the NWT. Native people will have strengthened local governments and an expanded role in planning the nature and direction of resource development.

The possibilities for mineral development in the ITC claim area are substantial, and the future of resource development in this region has implications for the welfare of all northerners, and for all Canada. It is therefore important that all parties to the negotiating process understand the possible consequences of their decisions and actions. The purpose of this study is to contribute to that understanding.

For further information contact:

Centre for Resource Studies
Queen's University
Kingston, Ontario
K7L 3N6
(613-547-5957)

## EASTERN ARCTIC STUDY PUBLICATIONS

The following EAS publications are available from the Centre for Resource Studies, Queen's University, Kingston, Ontario K7L 3N6

A Climate for Change: Alternatives for the Central and Eastern Arctic, by Katherine A. Graham, M.P. Sharon Brown, Anne B. McAllister, and Margot J. Wojciechowski, Final Report of the Eastern Arctic Study, 198 pages, published 1984.

The Inuit Land Claim, Constitutional Development, and Local Government Reform in the Northwest Territories: An Overview, by Katherine A. Graham and Anne B. McAllister, 50 pages, published 1981.

Industrial Development in the Eastern Arctic Study Area: A Preliminary Overview, by C. George Miller, 31 pages, published 1981.

Eastern Arctic Study Case Study Series: The Alaska Native Claims Settlement, by David Baker, 100 pages, published 1982.

Eastern Arctic Study Case Study Series: Mineral Exploration in the Baker Lake Area, by Anne B. McAllister, 58 pages, published 1982.

Eastern Arctic Study Case Study Series: The Development of the Polaris Mine, by Katherine A. Graham, 61 pages, published 1982.

Eastern Arctic Study Case Study Series: The Nanisivik Mine, by Margot J. Wojciechowski, 62 pages, published 1982.

Eastern Arctic Study Annotated Bibliography, by M.P. Sharon Brown, 68 pages, published 1984.

Eastern Arctic Study Case Study Series: The James Bay Settlement, by Anne B. McAllister, 61 pages, published 1985.

Eastern Arctic Study Case Study Series: Beaufort Sea Oil and Gas Development, by M.P. Sharon Brown, Katherine A. Graham and Margot J. Wojciechowski, 85 pages, published 1985.